

The Power of Poeticism in Architecture:

Exploring the Concepts of Teshima Art Museum

in Waikīkī

A DARCH PROJECT SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF
HAWAI'I AT MĀNOA IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
DEGREE OF

DOCTOR OF ARCHITECTURE

MAY 2018

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Keywords: Teshima Art Museum, Transcendental, Site, Procession, Nature, Light

Abstract

Within the dense urban setting is a lack of spaces that rouse inspired emotion while accommodating the masses of inhabitants. Meanwhile, in a rural setting, the Teshima Art Museum is a case where transient power is successfully established. The Teshima Art Museum is found in the Seto Inland Sea of Japan and was designed by Rei Naito and Ryue Nishizawa in 2010. The purpose of this dissertation is to explore the architectural design concepts of the Teshima Art Museum and translate the derived concepts into an urban environment such as Waikīkī in Honolulu, Hawai'i. This research includes an intensive case study as well as a subjective analysis of the author's experiences at the Teshima Art Museum. The four relationships used to examine the concepts of the Teshima Art Museum are site, procession, nature, and light. Then, a comparative analysis was done to examine how the relationship of the Teshima Art Museum and the four elements compare and contrast with other projects. These concepts have been tested in in a design experiment by translating the theories from the rural setting, to urban Waikiki. A new museum was designed by incorporating the concepts found in Teshima, but adapting them for a new environment. This design creates a new sanctuary space in an urban environments which addresses the initial problem presented. The Teshima Art Museum is not easily accessible to many people, so this design brings this type of space to a more densely populated area.

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1. Introduction

1.1 Project Statement

This research aims to analyze the architectural concepts found in the Teshima Art Museum in the Kagawa Prefecture of Japan and tests the established concepts in the urban context of Honolulu, Hawai'i. The transcendental power of the Teshima Art Museum makes it a sanctuary set apart from the normal realm—where the environment is surrounded by conventional architecture. Part of the success of the museum is its remoteness from urban life. Visitors become removed from their everyday surroundings and are transported there to the unknown. Teshima provides an experience that allows visitors to explore a new world and enables them to get away from the harshness of reality. “In architecture, ‘sacredness’ is either ignored as an irrational sphere, or it is reduced to stereotypes of spirituality and contemplation.”¹ This project aims to establish an emphasis between architecture and the poeticism of ‘sacredness.’

This project asks if the Teshima experience could be achieved if it were in the context of an urban environment, such as Honolulu. The goal is to determine whether or not it is possible to provide a transcendent space in places that lack it. Although the idea of creating a place of refuge within a city exists in various projects,² this project aims to achieve a space of transcendence.

In Le Corbusier's *Towards a New Architecture*, he writes, “architecture only exists when there is a poetic emotion.”³ Poetic language is found in the Teshima Art Museum.

¹ Architectural Association London, *AA Book 2013* (London: AA Publications, 2013), 156.

² Places like parks and churches.

³ Le Corbusier, *Towards a New Architecture* (London: J. Rodker, 1931), 215.

This unique set of vocabulary that will be explored in this research has made Teshima Art Museum one of the most anomalous experiences I have encountered. To understand the language of the Teshima Art Museum, it is necessary to identify first the language of other buildings that attempt similar concepts. Since Teshima Art Museum is a relatively novel piece of architecture, familiarizing with its language and comparing it with the language of other buildings is crucial to grasping the concepts found here. A subjective interpretative analysis has been done to develop a design project. My argument for this research is that it is possible to recreate the experience of the Teshima Art Museum in an urban environment by incorporating the four elements of site, procession, nature, and light.

1.2 Context for the Study

This section discusses my personal experience with the Teshima Art Museum, which had inspired this research of poeticism in architecture. *The Memory* is a recollection of my experience in 2014⁴ and *The Confirmation* is when I returned 2017. These subjective

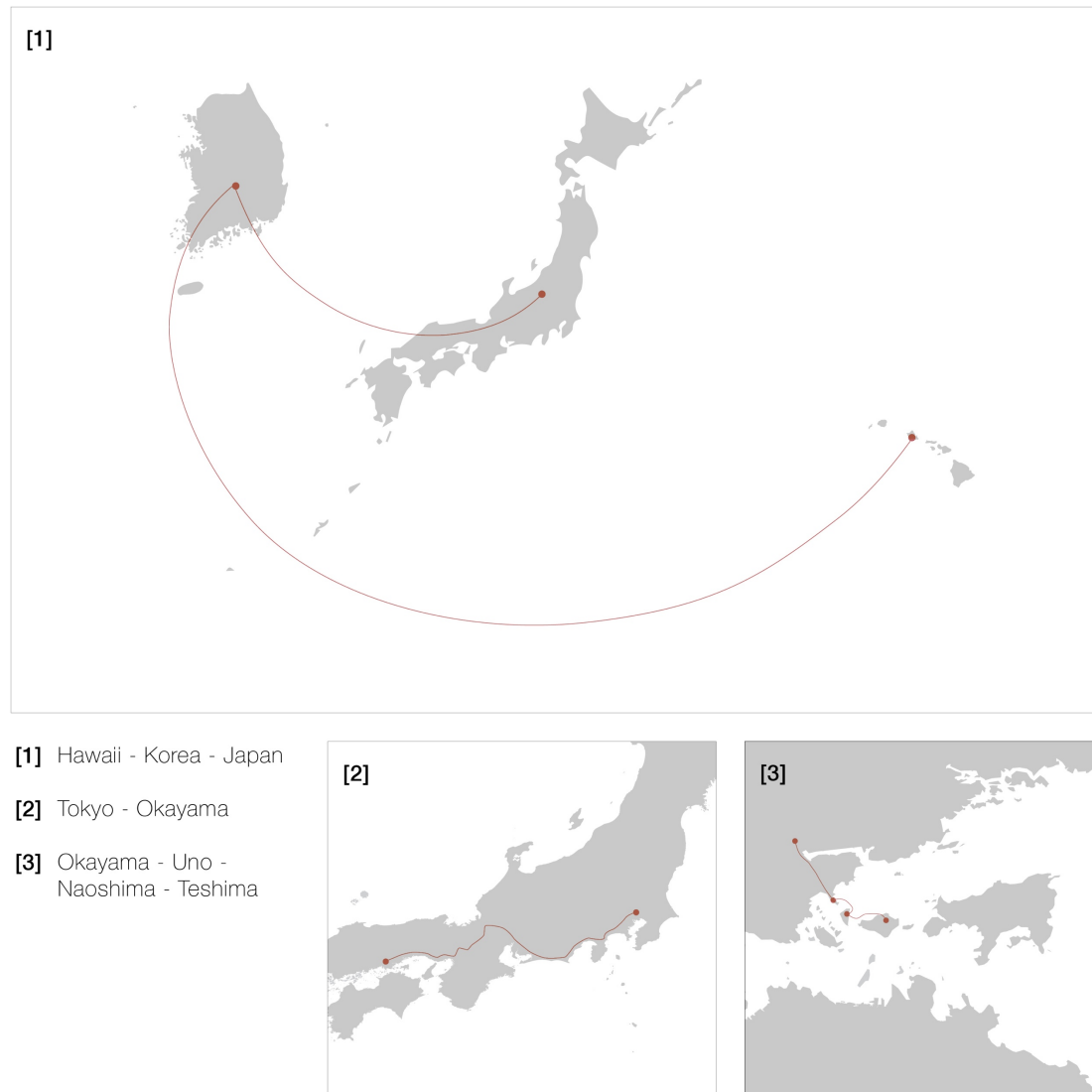


Figure 1 – The first trip to the Teshima Art Museum. Image: Author

⁴ My first trip to the Teshima Art Museum inspired me to study its experience. The journey started when I traveled to South Korea for a study abroad program. A group of architecture students and I took a trip to Japan to visit art islands we had heard about. From Tokyo, we took a bullet train to Okayama, then from Okayama, we took a bus to Uno port. Then, we took ferries to the islands (Figure 1).

experiences will be the foundation for analyzing the four relationships in the comparative analysis. The analysis will then lead to the inspiration for the design experiment that translates these experiences into the urban environment.

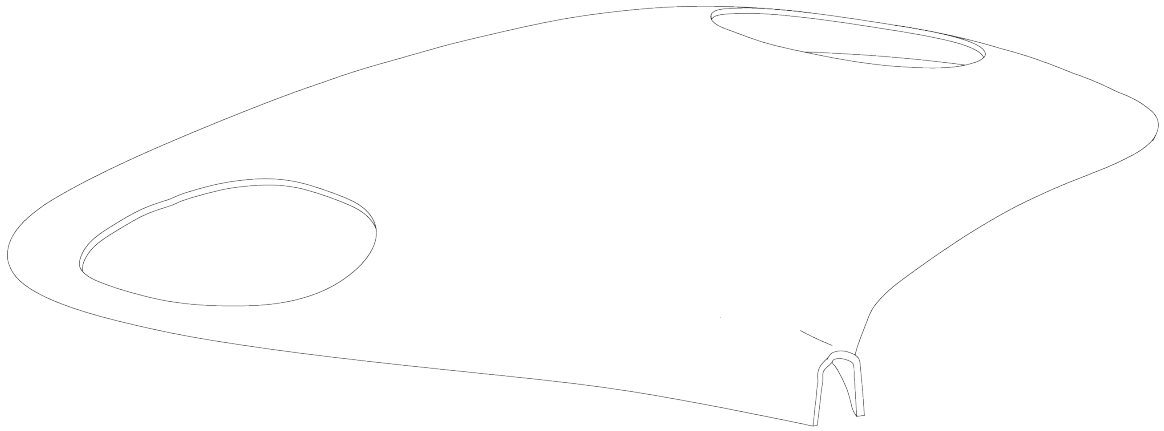


Figure 2 - Line drawing of Teshima Art Museum. Image: Author

The Memory—

It was a foggy day when we took a ferry from Naoshima to Teshima. We were nervous that the weather was going to dampen our travels. Aboard the ferry were happy couples, groups of friends, families with children, and people just going about their day. Arriving at the Iura Port on Teshima, I felt the calm of a quaint provincial life. This simple island was accompanied by simple lives. The bus that took us directly to the art museum drove on an elevated road along the coast. There were hardly any cars driving along beside us. There were around twenty people on the bus, all anticipating Teshima.

As we approached the site, only a glimpse of the white structure was visible. Its sculptural form blended in perfectly with the landscape of the hills and rice fields. The grey sky added a veil of mystery. When we arrived at the site, we first saw a small, white, shell-

like structure that we later found out was the café/gift shop. A paved path led us to a concrete structure that revealed itself as the ticket office. A staff member greeted us, and we went in to purchase tickets. After our purchase, we continued on the same meandering path that led us further from the museum—that we could see from a distance—and took us around a mountain. At this moment, we were overlooking the sea which seemed near and far at the same time. When we were finally able to draw ourselves away from the view, the path crept towards the main attraction. We were guided along the edges of the building and greeted by a small portal.

A staff member was at the entrance, controlling the number of people entering. When I entered the concrete shell, I absorbed the entire space at once. I felt encompassed by the walls. The openings on the ceiling allowed the sunlight to spill in.

The space was silent.

There was no set path to follow in the structure. The entire floor was white and open, undivided by any parting walls. People walked freely about, but when they walked, they did so slowly—trying to absorb every detail. These details were the elements that created the space: the elements that recalled a moment of refuge. While meandering, observers must be careful not to step on the droplets of water that came up from the ground.

I first noticed the edges of the building that seemed to be almost impossible to occupy. They were where the shadows were the most prominent. I saw small children trying to squeeze into the corner and wondered if I had to do the same. This provoked my sense of curiosity towards the rest of the building. I walked over to the pool of light that was

created by one of the openings, the opening furthest away from the entrance. I stood for almost a minute looking at the pool of water that was at the center of the light. I sat down at the edge of the light, being careful not to break the barrier between light and shadow. It was like an implied force field that stopped anything from entering. I moved away from the light and sat down again to watch the droplets of water come up from the ground and travel down to the larger pool of water. Some droplets caught other droplets along the way. I thought about myself as a droplet of water, catching people along my journey. Some people stay with you for the whole ride, and some get left behind and travel their own way. After a few more moments, I walked around the space again.

A piece of string hanging from the opening in the ceiling swinging back and forth with the movement of the wind caught my attention. At one moment, it hung lifelessly from the ceiling, but as soon as there was a gentle breeze, it started its graceful dance.

These are the moments I can recall after being there three years ago. Although I can retrace only bits of information, its lingering atmosphere still resonates powerfully.

The Confirmation—

We woke up at 6:00 a.m. but didn't get out of bed until 7:00 a.m. because of the frigid weather. Despite the coldness, I was excited to board the ferry to Teshima from Uno Port. The next ferry to Karato Port was at 11:10 a.m., so we went back to the Airbnb so I could recall and document my memories of Teshima. I wasn't able to remember every minute detail, but I could recall the emotion inspired by the place.

At 11:11 a.m., about thirty to forty people were on the ferry. They looked like the same demographics as those I saw on my first time at Teshima. Then, the ferry stopped at the first port. This second time, we went to the port closer to the museum and

walked. For a while, we walked up the hill, through a road that was flanked with the elevated land. It felt like we were walking through the earth. Since this was my first time going to Teshima from this end, I kept a lookout in the distance to catch my first glimpse of the building. With some patience, the top of the museum café started to appear from behind the hill on the left. To the right was the Seto Inland Sea that rested at the foot of the rice fields. Around the bend, we caught the peak of the museum itself.

It said, “Welcome home.”

I stood at the foot of the entrance for a moment, bracing myself for what could be another magical moment or a severe disappointment. To my relief, it was just as I remembered it if not better. I could hardly hold back the tears that were about to escape and join the other water droplets on the ground. I looked around to see if the other six people were as overjoyed as I was.

Since photography of the interior was not allowed, I had sketched my experience within the space (see Appendix A).

Sound. You could only hear the rustling of the trees and the chirping of the birds. At one point, there was a crying baby in the distance, but it seemed like no one noticed. I kept a count of how many people whispered “wow” as soon as they walked in. It was two, but I’m sure there were more who said it in their heads. In between the sounds of nature was the sound of stillness.

Feel. I could see the trace of hand streaks that brushed the interior of the shell. It was like I could see the traveling curiosity. While my fingers were freezing in the cold, I just kept on sketching my thoughts and my surroundings. There was a woman that looked like

she was in deep contemplation. I couldn't help but wonder why she was there. What was making her feel these deep emotions that could be seen on her face?

Sight. The people would circle the light but never enter it. Some stood, and some sat, but all were casting their shadows towards the light. I took a moment to look at the other pool of light where no one had gathered around. In a way, it felt lonelier. I turned around and there was a moment where everyone (body and water) stood still and was in unison.

This experience didn't change me as a person; it made me appreciate being human. If I hadn't gone to Teshima, I would still be at the same school, with the same jobs, with the same people. Teshima simply made me appreciate the pauses in life that will ultimately go on as it's intended. It will always serve as a reminder that we are all traveling on a journey and we may catch a few people on the way, but eventually, they will call for independence once again. However, like the water droplets, even though we travel in our separate ways, we will always end up in the same place.

The Memory

Teshima Art Museum visit in 2014.



The Confirmation

Teshima Art Museum visit in 2017.



Figure 3 – the Memory and the Confirmation. Photo: Author

1.3 Methodology

This research uses three primary research methods: a case study of the Teshima Art Museum, a comparative analysis of the Teshima Art Museum and four other projects, and a description and analysis of my personal experience at the Teshima Art Museum.

The case study of Teshima Art Museum included a site visit during the process. I have analyzed the characteristics of the building that contributed to my personal experience of the Teshima Art Museum through a comparative analysis. The comparative analysis is conducted through describing elements of buildings that utilize similar concepts and comparing them to elements of Teshima Art Museum. This study was done to compare the familiar to the lesser known.

The context and research portion analyzes whether or not this experience exists in any other forms of architecture. I first discuss the history of Teshima Island and what led to the planning of the Teshima Art Museum. I then discuss the museum itself and the architect and artist that developed the space. This then leads to the comparative analysis of Teshima Art Museum with aspects taken from other buildings. Within this comparative analysis, a phenomenological study will be used to apprehend the experience with the space.

The framework for each analysis will begin with defining the architectural relationship in subject. Then, it will describe how the Teshima Art Museum illustrates this relationship. Following will be the introduction of the comparative project and how that also represents the relationship. It will then emphasize how the Teshima Art Museum expressed the relationship differently through a comparison. The comparative analysis will go over four architectural relationships that were based on my personal understanding of what contributed to the experience of the Teshima Art Museum: site, procession, nature, and light.

A synthesis is extracted from the comparative analysis which will inform the design experiment conducted in the urban context of Waikīkī.

The question that this study seeks to identify is whether or not the experience of the Teshima Art Museum can exist anywhere else. To test the theories that have been interpreted in the Teshima Art Museum, I have chosen to apply it to a site that is at the other end of the spectrum of its environment type. I then explain my design process on the proposed space and will critique it using the same elements used in the comparative analysis.

2. Context

2.1 History of Teshima

Teshima (豊島) is a small island found in the southern part of Japan in the Seto Inland Sea. This island of only 14.5 square kilometers (5.6 square miles) is part of the Kagawa Prefecture. Teshima has a rich agricultural history, filled with rice cultivation, dairy farming, and fishing from the small port towns on the island. It was once a place abundant with food – hence its name directly translating to *abundant* (豊) *island* (島).⁵ As of February 1, 2015, the population on the island was at 920 people, but before World War II, up to 2,700 people had lived on the island.⁶

During a period from 1975 to 1990, Teshima's agricultural industry was disturbed by the introduction of an industrial waste disposal plant. In 1975, a hazardous waste treatment company made plans to build a plant on the west side of Teshima Island, but was denied by the Kagawa prefectural government. Then in 1978, the same company made another proposal for a plant, this time claiming to only treat non-hazardous waste for recycling. They were ultimately granted permission by the prefectural government. It had been discovered later that shredder dust and waste oil were being burned and disposed of on the island, and not being recycled by the plant. In 1990, the Hyogo prefectural police conducted an investigation of the company uncovering these wrongful practices. The business was forced to stop, but the waste was left behind. After surveying the site, it was calculated that there was 500,000 metric tons of waste. Of that, 440,000 metric tons was

⁵ Müller, Lars; Miki, Akiko; Kagayama, Hiroshi; Iwan Baan, *Insular insight : where art and architecture conspire with nature* (Baden: Lars Müller Publishers, 2011) 360.

⁶ Ibid., 360.

found to be toxic. As a result, the Environmental Disputes Coordination Commission was established under the Law Concerning the Settlement of Environmental Pollution. Its objective was to resolve environmental disputes quickly and smoothly without relying on a court. A temporary agreement was drawn in 1997. A final arrangement between the Teshima applicants and Kagawa prefectural government was established in 2000.⁷



Figure 4 - Setouchi Islands.

During this time, efforts to revitalize Teshima started developing with full force. One such effort was the Setouchi International Art Festival, which began in July of 2010. Because of its success, the event had evolved into the Setouchi Triennale, and was hosted again in 2013 and 2016.

⁷ Hiroshi Takatsuki, *The Teshima Island industrial waste case and its process towards resolution* (Berlin: Springer-Verlag, 2002), 26.

Another revitalization effort is the “Benesse Art Site Naoshima” (ベネセアートサイト直島). Which is a collective name for all art-related activities conducted by the Benesse Holdings, Inc. and Fukutake Foundation on the islands of Naoshima, Teshima, and Inujima.⁸ Their mission is to “create significant spaces by bringing contemporary art and architecture in resonance with the pristine nature of the Seto Inland Sea, a landscape with a rich cultural and historical fabric.”⁹ The two pioneers for this vision are Tetsuhiko Fukutake, founding president of Fukutake Publishing, and Chikatsugu Miyake, mayor of Naoshima during the time.¹⁰

The influence of the art projects that had been taking place in Naoshima expanded to the island of Teshima. Together with the construction of Teshima Art Museum, the people of the island were motivated to restore 10 hectares of barren land into farmland and rice fields. Neighboring the site of Teshima Art Museum are terraced fields that also act as a sign of regeneration on the island.¹¹

⁸ “About Benesse Art Site Naoshima,” Benesse Art Site Naoshima, accessed December 1, 2017, <http://benesse-artsite.jp/en/about/>

⁹ Ibid.

¹⁰ Ibid.

¹¹ Ibid.

2.2 Teshima Art Museum



Figure 5 - Rei Naito/Ryue Nishizawa, Teshima Art Museum. Kagawa Japan, 2010. Photo: by author.

The Teshima Art Museum opened in October 2010 as a part of the Setouchi International Arts Festival. It was designed in collaboration with architect Ryue Nishizawa and artist Rei Naito. This project is far from the typical typology of a museum. During the conceptual development of the project, Nishizawa and Naito had met together and asked what each wanted to do. The design was based off a collaboration between artist and architect with a consideration of the wider surroundings on the island.¹²

¹² Responded by Naito when asked about how she and Nishizawa considered the space of the building during an interview. Naito, Rei, interview by James Jack. 2009. *Nature giving birth to nature* (December 14).



Figure 6 - Ticket booth and path. Photo: Graham Hart.

The structure is set among the hills of Mt. Myojin overlooking the sea. The organically shaped building symbolized rebirth during a time of active revitalization for the island. The structure holds one permanent installation, titled *Bokei* (母型) which translated to *Matrix* which expresses the moments of life on earth.¹³



Figure 7 - Bench holding slippers. Photo: Graham Hart.

On the site are three components – the ticket booth, the café/gift shop, and the museum, all connected by a paved pathway. The path starts at the ticket booth which is a concrete box, nestled within a grassy mound. The ticket booth is a transitional space from the exterior to the interior space of the museum complex. The path that connects the buildings seems to float over the grassy hills and natural setting. Its concrete edge has a reveal beneath it that gives it the appearance of sitting on top of its surroundings. Before arriving

at the museum structure, the path takes the observer on a scenic route around a hillside to a vista that overlooks the sea. The architect provides a simple steel bench to provide a resting spot to observe the view. During this time, the observer is completely surrounded by nature and the architecture disappears for a moment. After rounding the hillside, you

¹³ Müller, *Insular insight: where art and architecture conspire with nature*, 322.



Figure 8 - Teshima Art Museum under construction.



Figure 9 - Plan and sections of the Teshima Art Museum.

come upon the museum structure nestled within the landscape. Its foreign nature gives little evidence to how it came to be in this location. The museum structure takes the form of a white concrete shell that is freeform like the surrounding hills. Right outside the entrance of the museum proper, a low concrete bench hold slippers (Figure 7) that the visitor is instructed to switch in to by a staff member. The staff member also instructs the visitor on proper protocol in the structure such as no photography, to keep silent, and to be mindful of the installation on the ground when walking. The one-room space is unsupported by columns or pillars making the space feel free and open. Constructing the structure required erecting a mound of earth to create the shape. Then mortar was laid as a separation layer to create the mold. Rebar was then placed on top of this framework/mold. The concrete—made of white cement and limestone—was a single pour from

two points over a 22-hour period (Figure 8).¹⁴ This method allowed the curves of the shell

¹⁴ Keiko Arima, "Teshima Island: Rebirth Through Art and Architecture," *Detail*, (2011): 133.

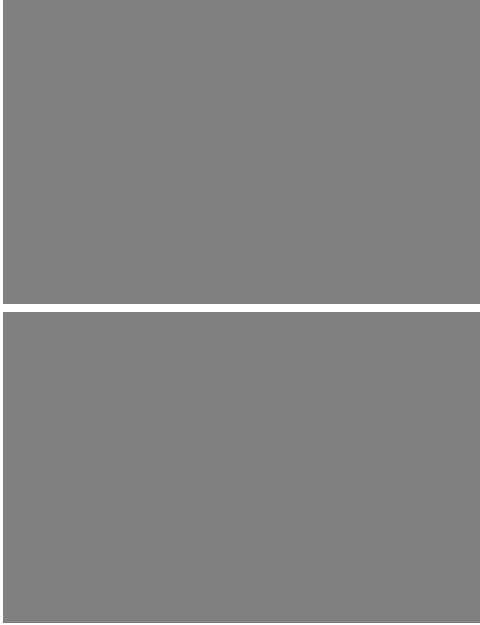


Figure 10 - *Matrix* by Rei Naito. Photo: Naoya Hatakeyama.

structure to flow freely.¹⁵ The structure is 4 meters (13 ft.) in height and 60 meters (197 ft.) in length and 40 meters (131 ft.) in width with two large openings towards the sky.

The structure is accompanied by elements of the art installation such as water puddles, string, white dishes, and marbles (Figure 10). Ground water emerges up from tiny holes in the concrete floor.¹⁶ Water droplets move across the floor,

pooling in certain areas and then breaking off and

moving to the next puddle, catching other droplets along the way. The white dishes and marbles are fixed on the floor are scattered throughout the structure. Elements of string hang from the ceiling. Some are arched come straight down and dangle just above head height. The water and string move with the wind.



Figure 11 - *Teshima Art Museum Café*, interior. Photo: Benesse Art Site Naoshima.

The café/gift shop mimics the language of the museum but is made at a much smaller scale (Figure 11). It has a much more familiar atmosphere compared to the museum because it contains objects we are familiar with during everyday life. When entering the café/gift shop, it is also requested that visitors remove their shoes and

¹⁵ Ryue Nishizawa, "Teshima Art Museum," *JA* 83 (2011): 67.

¹⁶ Müller, *Insular insight: where art and architecture conspire with nature*, 191.



Figure 12 - Rei Naito during her "movement" on December 19, 1996, in 'Potential Aspects of Life.' Photo: Mark Diker courtesy D'Amelio Terras Gallery, New York.

change into provided slippers. In front of the entrance are low displays that form a loop with souvenirs of Teshima Island, the museum, the artist, and the architect. To the left is another circular arrangement that is the dining area where food and beverages are to be served by the accompanying café.



Figure 13 - Rei Naito, 'Potential Aspects of Life' (November 22-December 19, 1996) D'Amelio Terras, New York. Photo: Lucien Terras.

2.3 Artist and Architect

The artist of *Matrix*, Rei Naito, was born in Hiroshima in 1961. In 1985, she graduated from Visual Communication Design, College of Art and Design, Musashino Art University. Since then, she has held over twenty solo exhibitions and even more group exhibitions. Naito had gained

prominence in the art world with her installations *Under the Distance the Root of the Light is Flat* (1989) and *une place sur la Terre* (1991) which featured delicate elements such as pieces of glass and thin wire. The scope of her work started to shift in her work *Potential Aspects of Life* which had "moved from the creation of space of introspection to the creation of potential through the act of movement of the artist."¹⁷ Along with *Matrix*, she also has other work scattered throughout the three art islands.¹⁸

¹⁷ Tetsuo Shimizu, "The Impossibility of Art." *PAJ: A Journal of Performance & Art* (1998) 54.

¹⁸ Naoshima, Teshima, and Inujima. (Naito, Nishizawa, et al. 2016).



Figure 14 - *Garden and House*, Ryue Nishizawa. Tokyo, Japan, 2011.

Rei Naito is like her work at Teshima Art Museum, mysterious and ephemeral as she is defined by the existence of her work. In an interview with Yamaki Kasumi, curator at the Tokyo Metropolitan Teien Art Museum, she describes *Matrix* as being able to amaze and purify.¹⁹ In a documentary called *A Room of Her Own*, Naito refuses to appear on-screen. Yuko Nakamura, the filmmaker, had to find creative ways to represent the artist which correlates to the “invisible-made-visible” essence of her work.



Figure 15 - *Rolex Learning Center*, SANAA. Switzerland, 2010.

The architect of Teshima Art Museum, Ryue Nishizawa, grew up in the Kanagawa Prefecture near Tokyo. He graduated from Yokohama National University where he also holds a professorship.²⁰ Nishizawa founded SANAA with Kazuyo Sejima and the firm was awarded the Pritzker Prize in 2010. The Rolex Learning Center

in Switzerland (Figure 15) expresses similar architectural qualities to the Teshima Art Museum with large apertures allowing natural light to penetrate through the structure. Along with SANAA, the two architects maintain their individual architecture studios as well.

¹⁹ Rei Naito, “Conversations Vol. 1 Rei Naito x Kasumi Yamaki,” interview by Kasumi Yamaki.

²⁰ (The Pritzker Architecture Prize 2017)

A project that had been done by Nishizawa's office is the Garden and House in Tokyo (Figure 14) which transforms a home in the city into a green sanctuary.

When talking about the Teshima Art Museum, Nishizawa had said that he believed that this project was meant to create a space that would coexist in harmony with the art of Rei Naito, and the environment of Teshima.²¹

²¹ Müller, *Insular insight: where art and architecture conspire with nature*, 338.

3. Research

3.1 Comparative Analysis

This research studies the success of Teshima Art Museum as a sanctuary, by understanding its relationship with four main concepts. These elements are site, procession, nature, and light. Each element will be studied with a comparative project that have been selected by its relevancy to the relationship. These projects follow respectively: the Chichu Art Museum, the Shrine of the Book, the Nordic Pavilion, and the Chapel of the Holy Cross. Sanctuary, for the purposes of this thesis, is defined as a place for people to retreat from everyday life.

The sequence of the analysis of the four main concepts follows the organization of Herbert George's *The Elements of Sculpture* in an order from the most physical to the most ephemeral.²² By treating the architecture as sculpture, and not just building, we are adding an artistic lens to the analysis. I found that the Teshima Art Museum can be studied this way because of its deep integration between the architecture and the art. Neither piece can exist without the other. Each elemental relationship studied in the sections below is accompanied by comparisons of other buildings in order to familiarize the reader with the unique experience Teshima provides. These comparisons will also highlight how Naito and Nishizawa have approached the concept differently which makes it that much more unique.

The framework for the analysis starts with defining the architectural relationship. Then, it will go into how the Teshima Art Museum illustrates the relationship. Third, it will

²² Herbert George, *The Elements of Sculpture*. (New York: Phaidon Press Inc, 2014). 6.

introduce the comparative project that had been selected. Lastly, the analysis will emphasize how the Teshima Art Museum expresses the relationship differently.

Each analysis will use a phenomenological lens to study the experience at the Teshima Art Museum. Phenomenology will be defined as experiencing architecture as movement through space.²³

²³ From a lecture by Christopher Long, The New Space: Movement and Experience in Viennese Modern Architecture. Presented at the University of Hawai'i at Mānoa.

Architecture + Site

Site

Architecture will always have a direct connection with its site. A part of it is placed onto the Earth's surface and may sometimes, even penetrate it. In this research, site is defined as the physical location of a structure. This research also considers a structure's sense of place. The dialog between architecture and site should be harmonious. Good architecture has a relationship with its surroundings and respects the site. This chapter will look at the Teshima Art Museum and the Chichu Art Museum as site-specific works and will compare and contrast how they have intervened on their site. The relationship between structure and landscape shapes the users experience and the more in harmony this relationship is, the more tranquil the experience.



Figure 16 - Richard Serra, Tilted Arc, Federal Plaza, New York. 1981-1989.

The Teshima Art Museum could be described as being a site-specific intervention. The meaning of “site-specific” has been in debate, especially in the realm of public art. Site-specific is a term describing an object (architecture, sculpture, etc.) that has a relationship to its location, audience, and/or community. In the 1980s, there was a greater emphasis on public art's value over its aesthetic value, “or measured in aesthetic value in

terms of use value.²⁴ During this time, artists and critics believed that the “the more an art work abandoned its distinctive look of ‘art’ to seamlessly assimilate to the site, as defined by the conventions of architecture and urban design, the more it as hailed as a progressive artistic gesture.”²⁵ Therefore the greater the artworks social value would be.²⁶ Richard Serra countered this term site specificity with massive steel sculpture *Tilted Arc* in the Federal Plaza, New York (1981-1989) (Figure 16).²⁷ Serra’s proposal for sculpture was “an interruptive and interventionist model of site specificity”.²⁸ Although the objective of the two definitions are different, they have similar principles. “To move the work is to destroy the work,” is what Serra emphasized before construction and after deconstruction of *Tilted Arc*.²⁹ In the following projects, the relationship between architecture and site is expressed differently, although both projects have similar settings.

Site in Teshima

The Teshima Art Museum is not only seamlessly integrated within its rolling landscape but it also integrated with the history of its context of the rolling hills surrounded by water. Nishizawa and Soichiro Fukutake, former chairman of the Benesse Corporation and president of the Fukutake Foundation, had selected the hillside site in the Karato district with a vista towards the sea. Fukutake had wanted the museum to have a connection with the nature of the site, from the ocean views to the surrounding rice terraces. Nishizawa had found freedom and gentleness important to express for the

²⁴ Miwon Kwon, *One Place After Another: Site-Specific Art and Locational Identity* (Cambridge: MIT Press, 2002), 69.

²⁵ *Ibid.*, 72.

²⁶ *Ibid.*, 69.

²⁷ *Ibid.*, 72.

²⁸ *Ibid.*, 72.

²⁹ Richard Serra, "'Tilted Arc' destroyed." *Art in America* 77 (5): 34-47 (1989): 35.



Figure 17 - Aerial view of the Teshima Art Museum.

coexistence of the landscape, architecture, and art. The building height was reduced to the minimum (4.67 m)³⁰ according to its floor area (2,334.73m²)³¹ for a harmonious addition to the surrounding environment as well as to emphasize the significance of Naito's installation.³² It was also to

emphasize the horizontal feel of the setting.³³ The curve of the museum mimics the surrounding hills on the island. Teshima gives the illusion that it has been there all along, among the rural mountain peaks. Although its materiality differs from its landscape, its form takes the natural shape of the hills.



Figure 18 - Teshima Art Museum within the rice fields.

The Teshima Art Museum's connection with the rice terraces not only connect the architecture with the site, but it also reconnects the site with the people. By reestablishing the rice field industry on the island, people regained a sense of place, which was one of the main goals for

establishing the Teshima Art Museum. The people have regained a sense of ownership of the land by tending to the environment.

³⁰ Nishizawa, "Teshima Art Museum," 67.

³¹ Ibid., 67.

³² Rei Naito, Ryue Nishizawa, Chris Dercon, and Noi Sawaragi, *Teshima Art Museum* (Fukutake Foundation, 2016), 112.

³³ Ibid., 338.

The shell was created by forming a mound using earth displaced from the site during construction. Although this method of construction was used historically in Japan during World War II to build aircraft hangers, it had never been attempted in the building of an art museum.³⁴

Nishizawa also designed the landscaping surrounding the museum in which he chose to use only local vegetation.³⁵ With the use of local vegetation, the museum feels like it too has grown up out of the ground. There is a continuous connection between the surrounding nature and the actual structure. There is no indication of where the designed site and the natural site meet. The experience was designed specifically for this site and would not have been successful anywhere else.

The relationship between the site and the edge of the building shows how Nishizawa had considered the way the space was to respect the landscape. Nishizawa has noticed the irregular, curving contours of the topography around the site and thought that the droplet-shaped building would function as a strong architectural shape and still be able to blend in with the undulating landscape.³⁶ Although the edge of the structure suggests a boundary between the interior and the exterior, it actually feels like it's an extension from the ground emphasizing the blurred lines between architecture and nature. While on the interior, there is an impression of being inside the earth. The edge does not define the end of the building but rather the interstitial space.

³⁴ Nishizawa, *Teshima Art Museum*, 67.

³⁵ Naito, Nishizawa, et al. *Teshima Art Museum*, 339.

³⁶ *Ibid.*, 338.

Site in Chichu Art Museum



Figure 19 - Tadao Ando, Chichu Art Museum. Naoshima, Japan.

The Chichu Art Museum is situated in a similar site context as the Teshima Art Museum. The Chichu Art Museum by Tadao Ando is a site-specific art museum situated on the island of Naoshima, neighboring Teshima. It is also a part of the Benesse House Project

(Naoshima Fukutake Art Museum Foundation?) that aims to revitalize the surrounding place through art, architecture and nature. This project was chosen to compare against the Teshima Art Museum because they are placed within the same context but approach site-specificity with different techniques.

The 27,700-square-foot museum is made up of concrete voids that are embedded in a hilly site which heeds back to its name, *chichu*, which is translated to “within the earth.”



Figure 20 - Tadao Ando, Chichu Art Museum, entrance. 2004, Kagawa, Japan.

The museum recedes underground to heighten perception and to have the observer focus on what the forms do rather than the forms themselves.³⁷ The entrance of the reinforced-concrete museum is initiated by a ramped walk that

³⁷ Müller, *Insular insight: where art and architecture conspire with nature*, 180.

leads to an opening in a concrete wall (about 4 m tall) that terminates into the hillside. The museum holds permanent installations by three artists: Claude Monet, Walter De Maria, and James Turrell.³⁸ The visitor experiences these spaces through a series of walkways and courtyards that alternate between being in light and dark. This sequence provides the visitor with suspense that provokes further exploration. It is also interesting to note that the water lilies that are along the ramped walk are a connection to the *Water-Lilies* by Monet. This connection from the outer world to the inner world of the museum provides a glimpse of the destination.³⁹ Ando's hopes one day the building will eventually disappear into the landscape. Ando was able to "create a monumental space without the monumentality."⁴⁰

Comparison

Although the two projects are under similar site conditions, their treatment of the site is fundamentally different. Teshima differs from the Chichu Art Museum because it does not try to disappear into the landscape, it emerges from the ground—like the ground water emerging from the floor—making its presence known with its stark white concrete shell. The Teshima Art Museum maintains its sensitivity towards the surroundings with its low height that blends in with the hills.⁴¹ The concept of the Chichu Art Museum was to have the architecture disappear in the landscape so that the visitor directs their attention towards the space it creates. The concept of cut-and/or-fill is used in the two projects in different ways. The additive technique was used to create the mound of the Teshima Art

³⁸ Naomi R Pollock, "Tadao Ando buries his architecture at the Chichu Art Museum so only the voids emerge from the earth," *Architectural Record* (October 2005): 116-123.

³⁹ An observation when I visited the museum in 2014 and 2017.

⁴⁰ Pollock, "Tadao Ando buries his architecture at the Chichu Art Museum so only the voids emerge from the earth,"

⁴¹ An observation when I visited the museum in 2014 and 2017.

Museum while the subtractive approach was used to create the concrete voids of the Chichu Art Museum.

From the exterior of the Chichu Art Museum, it looks like it is hidden within the landscape—the natural site is the dominating feature. However, when you enter the museum the site disappears as you enter the man-made domain. The opposite happens at the Teshima Art Museum. From the outside, the Teshima Art Museum is in harmony with its landscape but stands out because the white concrete shell is emerging from the landscape. When you are in the space, there is a connection established between the form and the hills around it and the connection of the site is still present.

The design language of the Chichu Art Museum maintains honesty through its construction and material, as Ando does through most of his projects. There is beauty in the exposed ties of the concrete that shows a modular system in the construction of the museum. The experience between architecture and the site is clearly defined. In the Teshima Art Museum, its relationship with the site is organic, which makes the relationship between architecture and site ambiguous. The Teshima Art Museum attempts to reduce its monumentality with its minimalism.

When looking at the Chichu Art Museum in plan (Figure 19), strong geometry is being superimposed on to the landscape, but when one experiencing the building from a human perspective, the architecture becomes invisible because it is hidden beneath the earth. In contrast, the Teshima Art Museum follows the organic shape of the island but is emerges in elevation. The two museums use abstraction in their design methods. The Teshima Art Museum uses the abstraction of the hillside which the Chichu Art Museum uses abstract shapes punctured into the landscape.

Architecture + Procession

Procession

Procession is the scripted movement of people through architecture. What one experiences as they move through the space depends on the individual and even when they experience them. Despite this irregularity of experiences, the procession in architecture can influence the way one perceives a space. Processions typically follow along a path which leads the user to a destination through a prescribed sequence.

Procession is dependent on circulation to move people through architecture, and as Le Corbusier had said in 1930, “architecture is circulation.”⁴² Corbusier was describing the circulation both within the building as well as the approach to the building. Architecture is meant to be experienced. It is an art that can only be truly understood when you walk through it, over it, or under it. These experiences are dependent on the circulation and the sequence of moments that lead up to an event.



Figure 21 - Le Corbusier, Maison Dom-ino, France. 1914. Plan sketch of a Dom-ino house. Photo: Artists Rights Society (ARS), New York / ADAGP, Paris / FLC.

The word “circulation” made its way to architecture in the 1850s as a term used to discuss “the flow of elements like air and mechanical services but most importantly as a way of describing the movement of people through a space.”⁴³ Then towards the end of the nineteenth century,

⁴² Le Corbusier, *Le Corbusier Talks with Students: From the Schools of Architecture*, (New York: Princeton Architectural Press, 1999), 47.

⁴³ Lee Stickells, “Conceiving an Architecture of Movement.” *Architectural Research Quarterly* 14 (1): 41-51. (2010): 43-44.

“movement was reinforced as critical to the experience of architecture, particularly the notion that bodily movement was vital to the understanding of the form and composition of a building.”⁴⁴ This notion, that circulation is important to people’s understanding of a building, ties into the idea of procession. This was also a time when aesthetic experiences around movement and perception had been transformed. Sigfried Giedion’s concept of movement was discussed in his book *Space, Time and Architecture* in 1941. In it, his explains the “experience of a moving observer became a key theoretical trope of architectural design in the twentieth century.”⁴⁵ The moving observer progresses through a designed sequence of spaces. Le Corbusier’s work exemplifies how the mobile experience was integral to the design process. He argued for “an architecture developed through a fluid, three-dimensional orchestration of spaces that would relate to the meandering, active nature of human movement.”⁴⁶ In Corbusier’s Dom-ino House (Figure 21), he had envisioned an open floor plan, which created a meandering circulation.

This chapter will compare the Shrine of the Book by Fredrick Kiesler and Armand Bartos (1965) against the Teshima Art Museum because of the emphasis on the procession and its experiential journey to ending with a specific object (the former being the

⁴⁴ Ibid., 44.

⁴⁵ Ibid., 44.

⁴⁶ Ibid., 44.

Dead Sea Scrolls and the latter being *Matrix*). The sense of journey and removal from the real world into something unfamiliar creates a transformative experience.

Procession in Teshima

The travel to the Teshima Art Museum is part of its procession and part of the experience. If you start from the city of Tokyo⁴⁷, it requires a three-and-a-half-hour bullet train ride to Okayama Station, an hour bus ride to Uno Port, and a twenty-minute ferry ride



Figure 22 - Sequence of procession at the Teshima Art Museum.

⁴⁷ My first trip to the Teshima Art Museum started from Honolulu to Tokyo.



Figure 24 - (1) Street view of the site of the Teshima Art Museum. Photo: Graham Hart.

to Teshima Island. The transition from a fast pace setting to a rural environment removes the user from the urban environment. From the ferry port, visitors may either take a shuttle bus to the museum or take a bike ride through the mountainous island.

The Teshima Art Museum is nestled within the hills of Mt. Myojin. There are moments where the peak of the structure is behind the landscaping and then it slowly reveals itself when the observer walks around the bend.



Figure 23 - (2 & 3) View of path from the ticket booth. Photo: Graham Hart.

This paved path is important to the experience of the museum because it carries the visitor through a prescribed route that conditions the visitor for the museum experience. The concrete path is a physical link that leads the observer from the roadside into the site, around the mountain, and finally to the museum structure. The

concrete path starts on the edge of the road at about 11.5 meters wide (1 on Figure 22).

Flanking both sides of the path is bicycle parking for visitors. Sometimes, the cats of Teshima will sit on the seats of the bike, waiting for human attention. The path narrows as it approaches the ticketing booth inserted in the hills. After purchasing tickets, simple signage (2 on Figure 22) directs the visitor towards the museum café on the right or the path leading to museum to the left. The path pulls you away from the museum which is visible



Figure 26 - (4) Minimal intervention of bench overlooking Seto Inland Sea. Photo: by author.



Figure 25 - (5) Slow reveal of the museum. Photo: by author.

from the ticketing booth. The visitor is lead across a lawn that overlooks the rice terraces that terminate near the sea (3 on Figure 22). As a visitor continues around the mountain (4 on Figure 22) there is a simple bench that offers the visitor a stop to sit and take in the Seto Inland Sea (Figure 26). Continuing around the mountain, the museum slowly reveals itself to the visitor (Figure 25). The path is a channel for the visitor to prepare themselves for the experience in the museum. The path conditioned the visitor to have an intimate connection with nature which allows them to experience nature in an abstract way within the museum. It strips the visitor from what they normally see into a foreign space. Right before the entrance of the museum, a staff member explains proper etiquette before entering. Visitors must remove their shoes and remain as quite as possible in order to not disturb the experience of other visitors. The staff member also asks visitors to mind the water and dishes on the floor as they are part of the installation.

Nishizawa made the entry of the museum as small as legally possible so that visitors entered



Figure 27 - *Matrix*, Rei Naito. Photo: Naoya Hatakeyama Scanned from: *Teshima Art Museum Handbook*.

the space one by one.⁴⁸ At first glance, it may seem that there is no set path within the museum itself. There are no interior walls dictating space or hallways that guide the observer from one room to another. But with the puddles of water on the floor, the observer must be cautious not to step on them (Figure 27). It requires the observer to circulate around the naturally moving obstructions while taking in the space. Each journey is unique to the individual because of the organic nature of the space. The direction a person is to take within the space is ambiguous but intuitive. The water in the

floor is an obstruction that the visitor of forced to avoid and at the same time remain conscious of it at all times. The building relates to its context as a whole but seems to abstract itself to the absolute minimum, creating a space that is foreign and has many interpretations.

Procession in Shrine of the Book

The Shrine of the Book by Fredrick Kiesler and Armand Bartos is a museum in Israel that houses the Dead Sea Scrolls. It is situated at the top of a hill, removed from the city. The entry of the building takes you underground through a tunnel that gradually ascends to a funnel shaped dome. Kiesler had explained his design of the museum was to

⁴⁸ Naito and Nishizawa, *Teshima Art Museum*, 112.



Figure 28 - Shrine of the Book perspective rendering.

“evoke the historical connection of the Jewish people to the land and physically connected the birth of the Israeli state to rebirth of culture in the region.”⁴⁹

The Dead Sea Scrolls are ancient Jewish religious manuscripts found in the Qumran Caves near the Dead Sea.⁵⁰ These texts reflect the diversity and complexity within Jewish religious life.⁵¹ The architects wanted to design a parallel between the emotional quality of the Dead Sea Scrolls and the journey to witness the artifacts in person.

Keisler’s objective was to give a sense of nationalism to the people of Jerusalem.⁵² When people would emerge from the exit, they would see the new buildings being built during the 1960’s, a time of redevelopment. The idea behind the design was a signal of rebirth. The reason for its being subterranean is to “convey the story of the Scrolls, which

⁴⁹ The Shrine of the Book and the Sanctuary for the Dead Sea Scrolls, TXT_5192.

⁵⁰ Israel Antiquities Authority. 2012. The Digital Library: Introduction. Accessed February 19, 2018. <https://www.deadseascrolls.org.il/learn-about-the-scrolls/introduction>.

⁵¹ Ibid.

⁵² McGuire, Laura. “A Crown for Jerusalem: Architecture and Nationalism in the Keisler and Bartos’ Shrine of the Book.”

were long hidden from the eye of the man.”⁵³ He rejected the initial proposal of the scrolls being displayed in an ordinary square room in a new library under construction at the Jerusalem University. Instead, he believed that the historic scripts should sit in a space with equal transverse qualities as are in the content of the scrolls.⁵⁴

To promote this magnitude of the Scroll’s emotion quality, the architects curated the journey in which the user is to experience the power in the building. There are sixteen space units on the complex:



Figure 29 – Plan and section of the Shrine of the Book by Fredrick Kiesler.

“1) gently sloping lawn down a long retaining wall leading to a grove of trees, 3) the Square Fountain, 4) the Upper Part or the Vessel-Dome covered with two-hundred

⁵³ (culture relations department ministry for foreign affairs 1965), 11.

⁵⁴ Fredrick Kiesler n.d. The Shrine of the Book and the Sanctuary for the Dead Sea Scrolls, TXT_57941.

and seventy-one thousand white tiles, 5) a black basalt wall about sixty feet long and forty feet high and six feet thick, 6) open stair case leading down to a large rectangular patio, 7) to the right of the patio is the Research Library, 8) across from it is the Entrance to the Shrine proper, 9) Entrance to the exhibition hall facing the black basalt wall which descends one and a half stories below the plateau— opening to a square with a large tubular bronze gate, 10) through the bronze gate is an underpass of seven platforms, each six inches lower than the next—both sides of the platform are showcases that exhibit biblical manuscripts, 11) a seventy-five foot underpass supported by continuing arches that connect floor to wall to ceiling and slightly incline in different directions, 12) finally a high flat-chiseled stone wall containing a comparatively small bronze door split in half, 13) the main vessel-dome, a container for the seven Dead Sea Scrolls—a circular shell construction of double parabolic design, open at the top is a six feet three inches in diameter through which day light filters down the corrugated interior of the dome-vessel which has a diameter at the bottom of eighty feet, 14) two open stone staircases around the center of the dome-vessel lead downward to a rough stone crypt fifty feet in diameter which contains show cases with precious artifacts found in the Dead Sea region, 15) The exit from the dome area through one of the bronze doors into a twenty-eight feet long, the walls curved, along an elevated stone footpath leading directly into 16) an almost two-hundred foot open air meditation walk flanked by two high stone walls with three cut-outs, opening through which one

way view Jerusalem and its Parliament. Continuing the walk, one finally reaches a door which returns one to the common plaza of the other museums.”⁵⁵

The underground tunnel was designed to make the visitor feel like they are going through a cave, like how the scrolls were discovered. This is a literal interpretation of the experience of discovering the scrolls.

Comparison

Both forms of procession are choreographed to lead a visitor through a space with an intent to leave with an impression. The pathways were carefully designed to frame and highlight moments to provoke a memory/feeling/emotion. The difference between the two projects is that the Teshima Art Museum provides an open-ended response towards the space, whereas the intent of the journey of Shrine of the Book is heavily prescribed in that the architects wanted visitors' experience to be translated into a feeling of rebirth of the Jewish culture throughout the entire journey. In the Shrine of the Book, the procession is a formula with an absolute outcome of x . In the Teshima Art Museum, the formula has an outcome of x , *if*. The formula would be the processional experience with x as the takeaway and x , *if* as a conditional experience that would depend on the experience of the observer. Both approaches are strong in setting a tone, but the journey through the Teshima Art Museum allows people to interpret their experience in multiple ways. Both have a prescribed path approaching it but in the Teshima Art Museum, it is conditional. In the Shrine of the Book, the journey within the space is also choreographed.

⁵⁵ The Shrine of the Book and the Sanctuary for the Dead Sea Scrolls.

Architecture + Nature

Nature

In the section about site, site was defined as the physical location of a structure. Although nature is contextual to site, it deserves to be discussed as its own section as it concerns elements of nature through an intimate lens. The nature being discussed are elements such as weather, vegetation, and wildlife. Nature is an additional element to the experience because it goes beyond what the observer sees. You can feel the wind sweep against your skin, you can hear the rain pouring down, you can feel the sunlight peeking into the space. These elements of nature alter the perception of a space from just the visual observation. These sensorial elements, beyond just visual, are embedded into our memories. In Peter Zumthor's *Thinking Architecture*, he describes the phenomena of nature: "In addition to the feeling that nature is close to me and yet larger than I am, landscape also gives me the feeling of being at home."⁵⁶ When architecture opens up to nature, it creates this feeling of 'home' because nature does that in its own. Otto Friedrich Bollnow quantifies this feeling of 'home' as, "the reference point from which he builds his spatial world."⁵⁷ By connecting architecture and nature, observers may connect with this feeling of 'home' which allows them to explore a personal spatial relationship. It is important to maintain a relationship with the direct nature.

From a direct relationship with the environment, the observer gains an intimate connection with the experience because they are more in tune with their surroundings. There is a deeper connection between the observer and nature.

⁵⁶ Peter Zumthor, *Thinking Architecture* (Basel: Birkhäuser, 2015), 95.

⁵⁷ Otto Friedrich Bollnow, "Lived-Space," *Philosophy Today* 31-39 (1961) 32.

Nature in Teshima

One of the major goals of the Fukutake Foundation is to connect art, architecture, and nature together. As the foundation describes it, “here architecture and art conspire with nature and send signals of change out into the world, signals even more vital now...”⁵⁸ The museum acts as a catalyst in restoring the island to make it true to its name (*teshima* meaning abundant) and revitalizing its agricultural history. “The museum will emerge like spring water welling up from the hill, a harmonious blend of architecture, art, and the natural setting.”⁵⁹ Part of its success is its relationship to nature and stimulating the growth of the agriculture of the island perpetuates its rural setting. The Teshima Art Museum



Figure 30 - Wind blowing string. Photo: Naoya Hatakeyama.

promotes a sense of The Teshima Art Museum has achieved this goal with the elegance of a minimal intervention.

The Teshima Art Museum has an effortless connection with the outside world. Nature is allowed to breathe in and out of its apertures without a barrier between the interior and the exterior. While one aperture frames the ground, the other encompasses the sea and the sky.⁶⁰ Various forms of nature are allowed into the space from wind to rain, to birds, to

⁵⁸ Müller, *Insular insight: where art and architecture conspire with nature*, 19.

⁵⁹ Ibid, 322.

⁶⁰ Keiko Arima, "Teshima Island: Rebirth Through Art and Architecture." *Detail* (2011) 132-136.



Figure 31 - Insect and water in the Teshima Art Museum. Photo: Naoya Hatakeyama.

insects. The space has an honest connection with nature in that it embraces whatever nature has to offer. From the interior space, the observer is exposed to multiple elements of nature from one location.

The large round openings allow for light, wind, rain and other elements of nature to flow in and out of the space.⁶¹ This allows nature to be a part of it rather than isolating itself from the environment. Because the concrete shell structure is open-air, the temperature within the space is the same as the exterior. This results in a blurred boundary between the interior and exterior because of the similar conditions between both spaces.

Because the Teshima Art Museum is an abstract form, it highlights nature around it and in it. It provides a white canvas for the natural elements to be observed against.

⁶¹ Nishizawa, "Teshima Art Museum," (2012), 67.

Normally, we usually only feel the wind. At the Teshima Art Museum, *Matrix* allows you to see the wind move using the string hanging off one of the apertures. The phenomena of witnessing elements in a different way heightens the awareness of the observers.

Another element that is perceived in an unconventional way is the water droplets that stream down the holes in the concrete floor. This element of nature brings out the delicacy of water. The sounds of a single droplet going down the drain fills the entire space with its reverberation. There's something powerful in hearing something seemingly minute overpowering a space. Ground water emerges and moves across the concrete floor. When Naito was asked about *Matrix* in an interview, she responded that the museum had “no boundaries between nature and art. They are one. You never know what will happen from one moment to the next. Water seeps out, gleams, a ribbon moves in the wind. That is all. It tells us something about being alive. It's different for everyone, but when I go in there, it is as if I were entering for the first time.”⁶² The transitory quality of nature brings new life to the Teshima Art Museum which can only be achieved with its relationship with its environment.

“A space, just like that, comes into being as something that goes back to nature as it is.” – Rei Naito⁶³

⁶² Rei Naito, “Conversations Vol. 1 Rei Naito x Kasumi Yamaki” interview by Kasumi Yamaki, n.d.

⁶³ Naito and Nishizawa, *Teshima Art Museum*, 66.

Nature in Nordic Pavilion

The Nordic Pavilion by Sverre Fehn was designed in the late 1950s and completed in 1962 for the Venice Biennale as the exhibition pavilion of the Nordic countries. "A row of magnificent trees which could not be cut down, as the coherent foliage of the park was to be preserved so that there should not be any "gaps" in the only park in the city. The assignment was to construct a roof to protect the painting and sculptures from direct sunlight, and to provide an atmosphere of the "shadowless" world of Scandinavia, where the works of art have been created."⁶⁴ The roof structure was designed with concrete elements that seems borrowed by traditional timber construction.⁶⁵ Instead of using



Figure 32 - Sverre Fehn, Nordic Pavilion, interior. Venice, Italy, 1962.

⁶⁴ "Nordic Pavilion, Biennale, Venice, Italy 1958-1962," *A + U* 340 (1999): 20-31.

⁶⁵ Christian Marquart, "Poetry in Concrete, Wood, Light and Nature: Detail Honorary Prize Awarded to Sverre Fehn." *Detail* (2009): 235-327.



Figure 33 - Sverre Fehn, *Nordic Pavilion Venice Biennale*. Venice, Italy, 1962. Study sketch and oblique view of the pavilion. Photo: ARTstor.

traditional Nordic
architecture material, such
as heavy timber beams, he
decided to use thin
concrete beams in attempt
to rewrite the vocabulary

rather than mimic it.⁶⁶ “Two layers of parallel concrete beams, only six centimeters thick, are laid on top of one another on-edge, aligned at an angle of 90 degrees. The intense sunlight of Venice is reflected repeatedly within this grid, penetrating into the pillar-free exhibition space as diffuse “Nordic” light. The trees growing on the site were integrated into the architecture; the trunks project through the roof and have now become part of the exhibition space. This alone lends the pavilion a unique character in the context of the surrounding buildings.”⁶⁷

““When I build on a site in nature that is totally unspoiled, it is a fight, an attack,” [Fehn] has stated. “In this confrontation, I strive to make a building that will make people more aware of the beauty of the setting.””⁶⁸ This is apparent in the way Fehn respects the nature found on the site, but frames it in a Nordic atmosphere. The concept of the Nordic Pavilion was to recreate the Nordic atmosphere within a Mediterranean context. The architecture is transforming the local atmosphere into a completely different ambiance.

⁶⁶ James Taylor, “AD Classics: Nordic Pavilion in Venice / Sverre Fehn,” March 30, 2016, <https://www.archdaily.com/784536/ad-classics-nordic-pavilion-in-venice-sverre-fehn>.

⁶⁷ Marquart, “Poetry in Concrete, Wood, Light and Nature: Detail Honorary Prize Awarded to Sverre Fehn.” 236.

⁶⁸ The National Museum of Art, Architecture, and Design, Oslo. 2008. “Sverre Fehn.” *Modern Painters*, June 1: 35.

Comparison

The Teshima Art Museum allows some aspects nature to flow freely through the structure while nature remains static within the Nordic Pavilion. The two apertures in the Teshima Art Museum provide fluidity between the interior and the exterior letting the outside environment seep into the structure. The Nordic Pavilion is closed off and creates a controlled environment using its concrete beams to manipulate the light entering the space. The experience with nature in the Teshima Art Museum is a direct relationship with the surrounding nature whereas in the Nordic Pavilion, observers are looking at nature through a lens.

One embraces the atmosphere and one seeks to create a different one. The Teshima Art Museum chooses to highlight the local elements surrounding it while the Nordic Pavilion transforms the Mediterranean environment into something else. The high contrast of light and shadow is diffused through the thin fins that make up the roof structure. The Teshima Art museum creates a feeling that is more in tune with its context.

The elements of nature used in the Teshima Art Museum are local to its surroundings while the Nordic Pavilion is trying to recreate an atmosphere in an environment that is completely different. The Teshima Art Museum is able to enhance the mundane aspects of nature and enhance its presence in the space. It is able to do that because of the conceptual expression of the project. The effect nature has on the Teshima Art Museum is that it creates a stronger bond with its surrounding context therefore connecting the observer back to 'home.'

Architecture + Light

Light

The element of light has an ephemeral quality that provides the user with information about its space.⁶⁹ Light is the master of shadow which can transform the quality and perception of a space. The beauty between the relationship of light and shadow is that they cannot exist without each other. The quality of light has the power to set the tone of a space. This balance between what is in light and in shadow eliminate hierarchy between the two characteristics. What is in the shadow is just as important as what it illuminated. Junichiro Tanizaki discusses the interdependence of the two elements in his work *In Praise of Shadows*. He writes, “We find beauty not in the thing itself but in the patterns of shadows, the light and the darkness that one thing against another creates.”⁷⁰

“Light becomes tangible only when it lands on something solid—a body or a building—when it crawls, darts, engraves its presence on a wall.”⁷¹ The light becomes a focal point that emphasizes the quality of space or object. It becomes an implied barrier between what is illuminated and in shadow even when there is no physical division of space.

This section will use the Chapel of the Holy Cross by Pekka Pitkänen to compare against the Teshima Art Museum because of the way it uses natural light in its space. Light defines a space in which people may perceive a boundary, or a sacred object.

⁶⁹ George, *The Elements of Sculpture*, 6.

⁷⁰ Junichiro Tanizaki, *In Praise of Shadows* (Stony Creek: Leete's Island Books, 1977), 30.

⁷¹ Daniel Libeskind, *Breaking Ground: Adventures in Life and Architecture*. (New York: Penguin Group, 2004), 54.

Light in Teshima

Teshima solely relies on the natural light let into the space through its two openings. These openings allow the light to spill in and touch the void space which gives it a tranquil quality. In a room of minimal interference, the light becomes an object that visitors observe. The light had created a boundary that defined a space that people would not enter.



Figure 34 - Light coming into the museum.



Figure 35 - Light coming into the museum.

The quality of light in Japan allows the light that comes in to be a hard line or can be soft and diffused. The space can grow and shrink and move around the room depending in the time of day. The sunlight hitting the floor acts as a spotlight, creating a space of vulnerability and intimidation that most people do not enter. Retreating to the shadows along the edge provides a feeling of security. The light becomes a focal point for the space, for all the visitors to view at once. Undergoing the same phenomena becomes a singular experience.



Figure 36 - Light in the Teshima Art Museum.

In an interview with Kazuyo Sejima,⁷² she talks about the significance of white in their designs as well as the purpose of incorporating diffused natural light in all the spaces. She argues that white is a normal color in that it is used everywhere. Their objective for using the color white is to avoid hierarchy within the space—to bring the light everywhere and avoid contrast.⁷³ Although the light in the Teshima Art Museum tends to create a boundary, the parts in the shadows are equally significant. She describes that by diffusing the light, people feel ‘white.’ As Sejima had described her definition of white as a ‘normal’ color, she is describing an expression of sameness within the space. There is no hierarchy

⁷² Cofounder with Ryue Nishizawa of SANAA (Sejima and Nishizawa and Associates).

⁷³ Kazuyo Sejima, “Kazuyo Sejima Explains the Influence of Light and the Color White in SANAA's Work”, interview by José Tomás Franco, *ArchDaily*, September 28, 2016, video, <https://www.archdaily.com/795815/kazuyo-sejima-explains-the-influence-of-light-and-the-color-white-in-sanaas-work>.

therefor everyone is equal. The Teshima Art Museum has no hierarchy making everything in the room visually significant. Since the room is so bare, the elements in the space are highlighted. The light that comes into the space creates an atmosphere of openness. The two apertures are located at opposite ends of the museum, allowing light to enter the structure in two locations.

Throughout the day, the light through the apertures shift positions on the white concrete floor. The light is so integral to the experience of the museum that it is only open during the hours of light.

The shadows created at the edges of the building blur where the floor and the wall meet. The sense of mystery calls the attention of the observer that draws them to the outskirts of the space. An optical illusion is created and the observer will interact with the shadow. After spending a few moments contemplating on the edge of the building, the observer turns around and the light is revealed again.

The light comes into the museum without being transformed into anything else. There is no filter and it is a symbol of pure honesty.

Light in Chapel of the Holy Cross, Turku

The Chapel of the Holy Cross in Turku, Finland was designed by Finnish Architect Pekka Pitkänen in 1967. The approach to the funeral chapel is through a vertical screen of



Figure 37 - The Chapel of the Holy Cross, behind the pine trees. Photo: Bundit Kanisthakhon.



Figure 38 - The Chapel of the Holy Cross, entrance. Photo: Bundit Kanisthakhon.



Figure 39 - Shadows casted on exterior wall. Photo: Bundit Kanisthakhon.



Figure 40 - Entrance vestibule with a flood of natural light. Photo: Bundit Kanisthakhon.



Figure 41 - Transition from normal light to sacred light. Photo: Bundit Kanisthakhon. P17.

thin pine trees that blend the chapel in with nature (Figure 37). At the end of the approach, the chapel reveals itself on an open lawn (Figure 38). The chapel has a modest form that uses simple elements of glass openings and skylights to manipulate the effect of natural light within the space. The effect of natural light is in effect during the approach to the chapel. Along the path towards the entrance, a wall follows the path that allows the trees to cast shadows onto it (Figure 39). In the entrance vestibule, a glass wall allows for natural light to shine in creating a unique indoor-outdoor environment (Figure 40). The quality of the light changes as you walk into the main chapel. Figure 41 shows the thin sliver of natural light at the top that subtly suggests the transition from a normal light to the sacred light in the main chapel. It's

interesting to point out that these elements of light are coming from the same source but the atmosphere drastically changes with the composition of the architecture.



Figure 42 - Chapel of the Holy Cross, interior. Photo: Bundit Kanisthakorn.

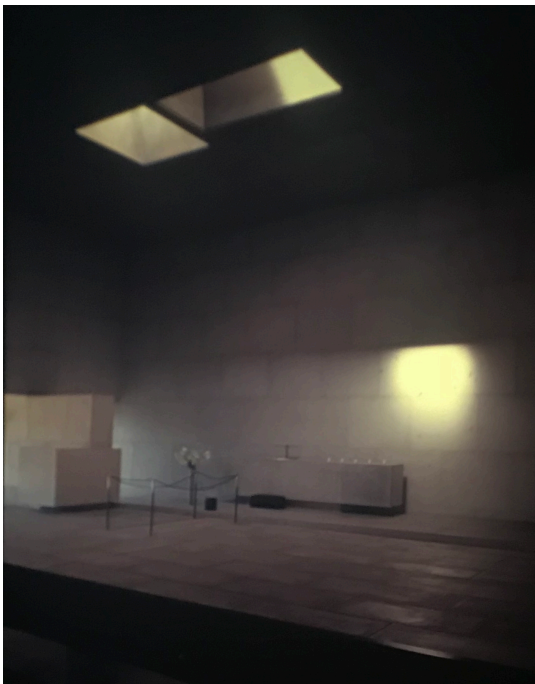
“The interior space of the Chapel of the Holy Cross is minimal, austere with selective beams of light cutting through the void.”⁷⁴ The chapel uses curated skylights to highlight certain elements of the building.

The skylight is a device used as a tool to transform the natural light into a different quality. A long skylight is located at the edge of the entrance and two others above the altar. The light that comes through the long entrance travels down a light shaft, creating a soft eerie glow. This light invites people to bask and sit on the provided bench. The light that comes down in front of the altar reflects light onto the front wall. It reflects symbolism of a divine power coming from above.

⁷⁴ Jennifer Wong, *Finland West: The Sacred and The Profane*. June 12, 2012. Accessed February 9, 2018. <https://archinect.com/TheArchitecturalVennDiagram/finland-west-the-sacred-and-the-profane>.



*Figure 43 - Pekka Pitkänen, Chapel of the Holy Cross, plan.
Highlighting the skylights in the chapel.*



*Figure 44 - Chapel of the Holy Cross, interior.
Photo: Bundit Kanisthakhon.*

Comparison

Light is used as a lens to highlight elements in these spaces. In the Teshima Art Museum, the light coming from the apertures emphasize the single installation. In the Chapel of the Holy Cross, the light coming from the long skylight focus on the long concrete bench that is used by the choir. In both spaces, the light glorifies the spaces that they touch. This feeling is possible with the support of the shadow that surrounds the light.

While the light over the concrete bench in the Chapel of the Holy Cross is inviting the user to enter the space, the light in the Teshima Art creates a barrier that people do not enter. It is an unobstructed portion of the floor that is gazed into. The sacred light is represented in different ways. With the lack of interior walls, the light becomes the main definition of space within the structure. In the Chapel of the Holy Cross, it only acts as a supporting element to a room that is defined by conventional architectural elements. What this does in the Teshima Art Museum is that the light on the floor becomes the object of focus. The light becomes the art work and people stand around looking at it as if it were tangible. In the Chapel of the Holy Cross, the light illuminates a part of the architecture. The light is still a definer of space but does not act as an object. In both projects, light plays a major role in defining its atmosphere but in the Teshima Art Museum, the light is respected as its own element.

3.2 Synthesis

To synthesize down the comparative analysis from the sections before, I have consolidated the findings into the framework below. This framework follows the previous relationships between architecture and site, procession, nature and light. In future sections, this synthesized framework is also used to critique my proposed design solution for translating the learnings of Teshima Art Museum, into urban Honolulu.

Architectural Relationships	Theory
Site	The relationship between the structure and landscape shapes the users experience and the more in harmony it is, the more tranquil the experience.
Procession	Removal from the real world into something unfamiliar creates a transformative experience.
Nature	From a direct relationship with the environment, the observer gains an intimate connection with the experience because they are more in tune with their surroundings. There is a deeper connection between the observer and nature.
Light	Light defines a space in which people may perceive a boundary, or a sacred object in which light becomes its own element.

These ideas that have emerged from a subjective comparative analysis shows that the Teshima Art Museum has a strong connection with its context. It does this using the four architectural relationships: through an abstract representation of the surrounding hills, using a path that takes advantage of the views around the site, accepting the surrounding landscape into the structure, and using the natural light to define and highlight space.

The refinement and abstraction of architecture creates a palate that is easily accessible to visitors. This space begins to get rid of the visitors' preconceptions so they can observe what is there. The Teshima Art Museum has been refined and abstracted to a degree in which architecture recedes and emphasizes the concepts of site, procession, nature, and light which contribute to awareness of the observer. There is a dialogical relationship between the experience and the experiencer.

Because these concepts were so important to the success of Teshima, they will have to be incorporated into the design of the urban sanctuary. Using these four concepts, the design experiment will seek to have a strong connection with its context while expressing a space of transcendence to create a meaningful experience.

4. The Problem

4.1 Testing the Theory

The theories of the Teshima Art Museum are very much site and context driven, which presents a problem. If the setting of Teshima Art Museum is already tranquil, could it still evoke a feeling of tranquility if it was sited in a different location? In order to test the theories synthesized from Teshima Art Museum, I will explore if the theories can be applied to a site at the opposite end of the spectrum—the urban environment.

I feel that in order to truly test the concepts of this research, the very variable at its core has to be changed. The context is a key element to the building's success, but its principles could be universal if properly applied. Hence, this change, from rural to urban, could be the thing that proves the effectiveness of these principles. This change in context isn't insignificant, and the spectrum from rural to urban isn't unnoticeable. The experiential difference and character between the two is vast. As Peter Zumthor writes, "I would describe the distinction between city and landscape like this: cities tend to excite and agitate me; they make me feel big or small, self-confident, proud, curious, excited, tense, annoyed...or they intimidate me. But the landscape, if I give it a chance, offers me freedom and serenity. Nature has a different sense of time, Time is big in the landscape while in the city it is condensed, just like the city's space."⁷⁵

⁷⁵ Zumthor, *Thinking Architecture*, 97.

4.2 Rural vs. Urban

Creating a tranquil environment in a rural setting is easier than in an urban context because the rural setting is already inducing the feeling of tranquility.

The urban environment can be considered as overwhelming and hostile, not a place for preserving and promoting human values.⁷⁶ This is an interesting juxtaposition against the goals of the Fukutake Foundation towards the Teshima and the surrounding islands. “The city may be a cultural oasis, a hub of commerce, the citadel of government, and the fount of civilization.”⁷⁷ The city impedes on the promotion of tranquil spaces because of its characteristics.

Part of the success of the Teshima Art Museum is its relationship with nature and connection with the rural environment. If the island were to urbanize, the design of the Teshima Art Museum would not convey the same experience. In order to convey the same manner of the existing Teshima Art Museum, it would have to be designed around the context of the city.

⁷⁶ Ibid., 65.

⁷⁷ Ibid. 63.

5. Design Experiment

5.1 Site Analysis

Urban Honolulu was chosen as the city to test the concepts of the Teshima Art Museum against because it is the city I am most familiar with. My close proximity accessibility to Waikīkī would allow me to perform a more thorough site analysis which would make it easier to apply the four principles of the Teshima Art Museum.

History of Waikīkī

Waikīkī is a district in Honolulu, Hawai'i that has become a popular tourist destination, attracting people from all around the world. Before tourism became Hawai'i's largest industry and Waikīkī became the urban core of the island chain, it was once marshland and home to the Hawaiian Royalty, due to its beautiful scenery, abundant resources, and central location. The Hawaiian translation of Waikīkī is *spouting water*.⁷⁸

It might be difficult to imagine Waikīkī without its beachfront hotels and tourists Instagramming⁷⁹ their vacation but before then, it was a productive agricultural area. Waikīkī was established as a settlement and farming center by the fifteenth century.⁸⁰ "In Waikīkī, streams irrigated taro plantations whose waters fed fishponds, and ponds near the shores contained brackish water that nourished varieties of fish and *limu* (seaweed). Indeed, Waikīkī's waters not only made the area a rich farming ground, but also a sacred place

⁷⁸ Pukui, Mary Kawena, and Samuel H Elbert, (Chan and Feeser n.d.) *Hawaiian Dictionary: Hawaiian-English, English-Hawaiian*. (Honolulu: University of Hawai'i Press, 1986).

⁷⁹ *Instagram* is a social media platform used to share photos and videos.

⁸⁰ Bertell D. Davis, *Subsurface Archeological Reconnaissance Survey and Historical Research at Fort DeRussy, Waikīkī, Island of O'ahu, Hawai'i* (Honolulu: International Archeological Research Institute, 1989), 76.



Figure 45 - Moana Surfrider was the first hotel of Waikiki Beach. Photo:
<https://i.pinimg.com/originals/6c/38/44/6c38442ef2fff9f06929f9fd853c9e71.jpg>

frequented for physical and spiritual renewal.”⁸¹ Waikīkī’s waters also provided *kānaka maoli* with sport and leisure through surfing and sucession for body and soul: a spring and section of ocean in Waikīkī were sites for healing procedures.⁸²

After the annexation of Hawai‘i in 1898, there was an anticipation of a growing tourism industry, which the Moana Surfrider, the first luxury hotel, took advantage of and opened in 1901. Also during this period, the territorial government had planned for a greater commercial and tourism development under the “Waikiki Reclamation Commission” which comprised of widening streets, and draining Waikīkī’s aquaculture as it was deemed

⁸¹ Gaye Chan and Andrea Feeser, *Waikīkī: A History of Forgetting and Remembering* (University of Hawai‘i Press, 2006). 5.

⁸² *Ibid.*, 5.



Figure 46 - Elvis Presley, *Blue Hawaii*, 1961 Movie poster. Photo: <https://i.pinimg.com/originals/5e/22/c6/5e22c60291be6ca7f325a60034711e1f.jpg>

a health hazard. The Ala Wai Canal was completed in 1928, draining the wetlands out completely and changing the ecosystem of the area. The land was then subdivided into 500 square foot lots which turned Waikīkī into a suburb.⁸³

The Royal Hawaiian Hotel, another beachfront luxury hotel, opened in 1927, which was promoted as a premiere visitor destination. Its elaborate opening ceremonies and events such as dinner and dancing attracted people not only from around the world, but residents as well.⁸⁴

Tourism slowed down in 1941, after the bombing of Pearl Harbor and World War II, as Waikīkī became a rest stop for soldiers and sailors. Tourism picked up again during the 1950s with the introduction of regularly scheduled airline services from the west coast. The Moana Surfrider also gained popularity when celebrities such as Elvis Presley came to the islands often.⁸⁵

Present day Waikīkī is zoned resort mixed-use. It is still a thriving tourist destination attracting visitors with luxury hotels, beaches, shopping, and entertainment all within walking distance from one another and also holds residents of Honolulu.

⁸³ "History if Waikiki," http://waikiki.com/insiders_guide/history_of_waikiki.html

⁸⁴ Ibid.

⁸⁵ Ibid.



Figure 47 - Project site in Waikiki context. Image: Author

425 Royal Hawaiian Avenue

The proposed site is located one block *Makai*⁸⁶ (southeast) from the Ala Wai Canal. Ala Wai Boulevard is parallel with the canal. On the site's Makai side is the Royal Kuhio. Kuhio Avenue is one of the two major roads in Waikiki—the other being Kalakaua Avenue, parallel to Kuhio Avenue and closer to the beach. Although development of Kalakaua took more prominence over the years, Kuhio is starting to grab the attention of developers and investors. The site is situated between Royal Hawaiian Avenue and Seaside Avenue. On its *Mauka*⁸⁷ edge runs Aloha Drive which is only two blocks long. There is also a narrow alley between the site and the Royal Kuhio. There are only sidewalks along Royal Hawaiian Avenue, Aloha Drive, and Seaside Avenue.

The site is located in a section of Waikīkī that was historically called Helumoa which is associated with Hawaiian royalty. Helumoa used to be known for its coconut grove of ten-thousand trees along the beach.

It is currently a vacant lot which is being considered to be developed into a park. On the site are a few palm trees and two matured banyan trees. The lot is surrounded by high-rise residential and commercial buildings. The maximum building height in the area is around 300 ft. and most of the buildings surrounding the property are built this tall.

⁸⁶ *Makai* is a Hawaiian word that is used as a directional term meaning toward or by the sea.

⁸⁷ *Mauka* is a Hawaiian word that is used as a directional term meaning toward or by the mountains.



Figure 48 - Existing site plan and axonometric diagram. Image: Author.

5.2 Design Description

The following is an experiential description of the proposed design. It is then critiqued in the following section with the four relationships examined in the comparative analysis.

The Approach—

The people in Waikīkī have varying agendas. Some are zipping from one tourist destination to another, others are trying to get to work on time, or are even on their way home from their job. Always going, never pausing. Tour buses and trollies carry tourists through the narrow streets. The noise of the city become background noise to the thought of the day's schedule. This chaotic blur is disturbed by an obscure image peeking through the skyline.

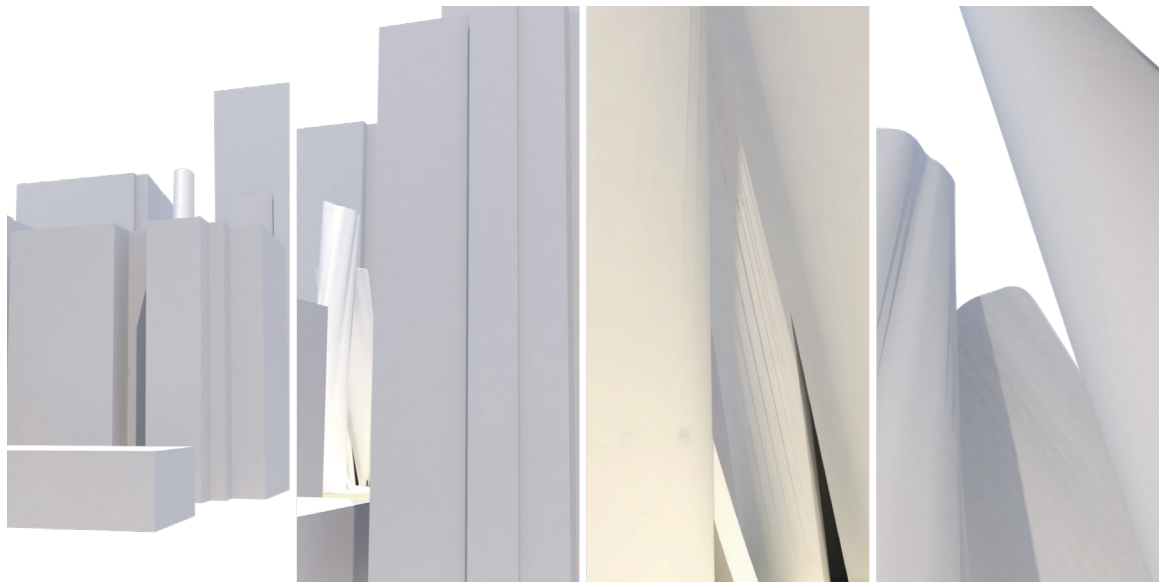


Figure 49 - Sequence of procession to the museum. Image Author.

Three white oblique concrete towers are juxtaposed among the conventional surrounding buildings and skyscrapers. Gaps between the nearby buildings frame the slender structures and then they disappear again. The towers follow the same vertical language of its context but differs in its obscurity. The slopes of the towers change at every angle, creating a new form at every turn. The approach around the corner of the block finally reveals three vertical structures that sprout up from a gravel lot.

The Transition—

A boundary of water and mounds encircle the site. Along the edge of the site without a sidewalk are mounds of coarse gravel that create a boundary between the two different places of Waikiki and this sanctuary. Along the remaining three edges is a water channel to cross over into a path made of the same material as the towers. The path also follows the line of the water channel around the lot with only one connection to the towers in the center. This encourages people to view the towers from multiple angles. The path



leads into the central plaza connecting the three towers together. The plaza is made of finer gravel. As you step off the path and onto the gravel, the feeling beneath the feet provides another layer of transition. Each step is accompanied by the crunching noise of tiny rocks rubbing against each other.

*Figure 50 - Transition from concrete to gravel.
Image Author.*

The Towers

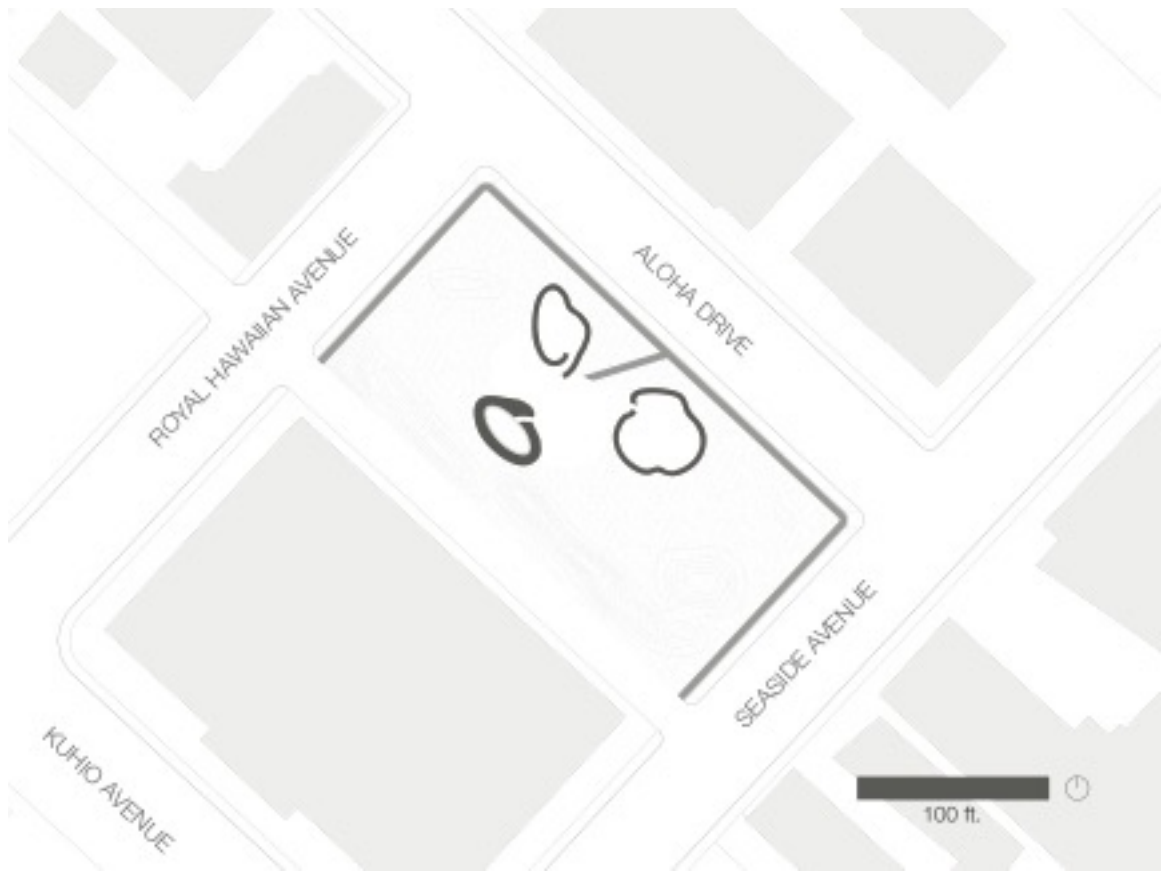


Figure 51 - Proposed site plan. Image: Author.

Between the towers, within the plaza, is the inner boundary that unifies the three towers together yet the towers still maintain their individuality with their individual water edges. The contour of the towers change form as they are extruded upward, changing the way the shadows interact with the structure throughout the day. The towers are also slightly slanted looking like the palm trees drifting in the sky or curtains billowing in the breeze. The white-concrete structure is contrasted by sea of beige in Waikīkī.

The entrances of the towers face inward toward each other, creating an inner boundary that allow the towers to speak to each other, sharing our secrets. The entrances

are barely noticeable until you reach the correct approach. The slit-like entrance reveal itself once its entirety is observed.

Tower 1 – Meditation

The first tower is experienced only from the ground. The opening at the top of the tower is a portal and the tower is a direct connection to the sky. The image of Waikīkī is obstructed by the gradient of light coming in from the top. The sound of Waikīkī is heightened. Suddenly, every car honk and bird chirp become something from the past—a memory of a time the same sound occurred. Throughout the day, the light changes shape against the uneven surface of the walls that are created by its twisting body. The shadows dance inside throughout the day.



TOWER 1 - MEDITATION

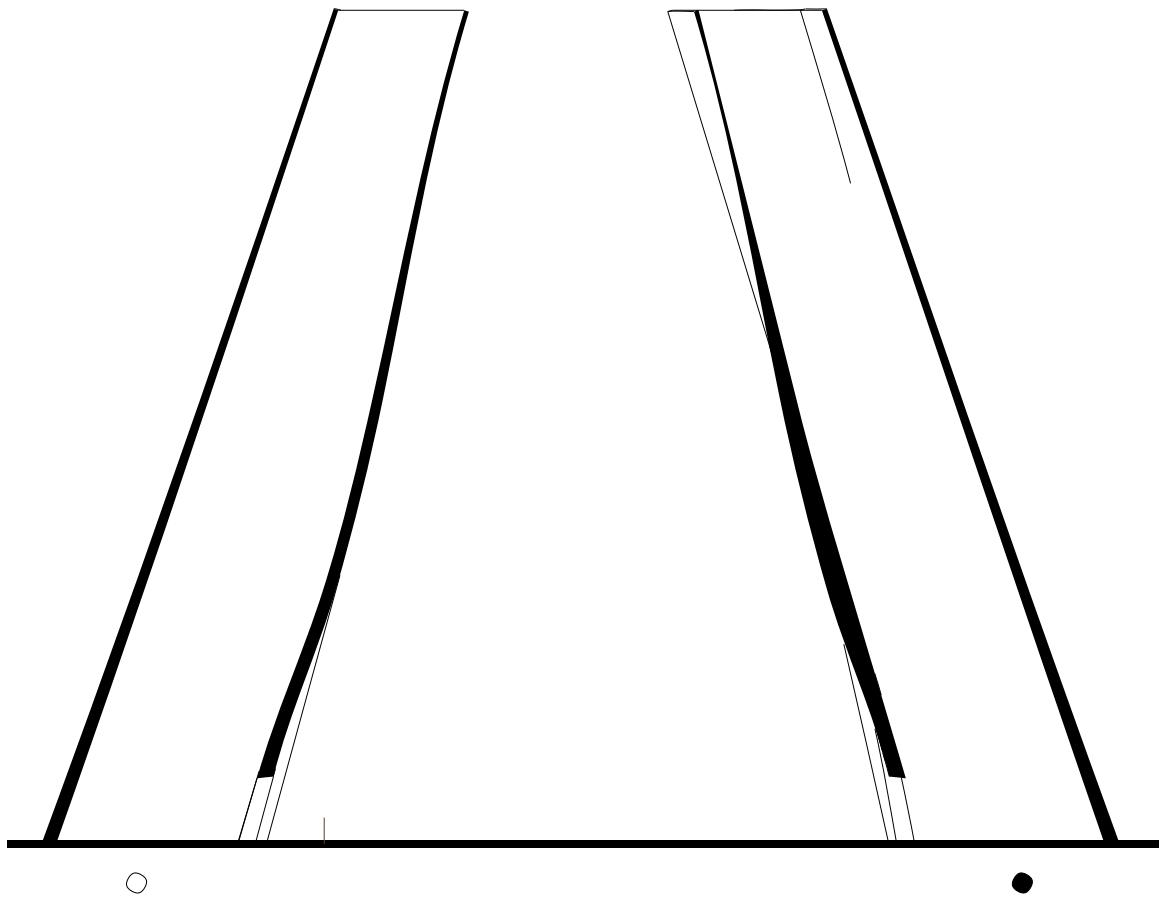


Figure 52 - Tower 1 section. Image Author.

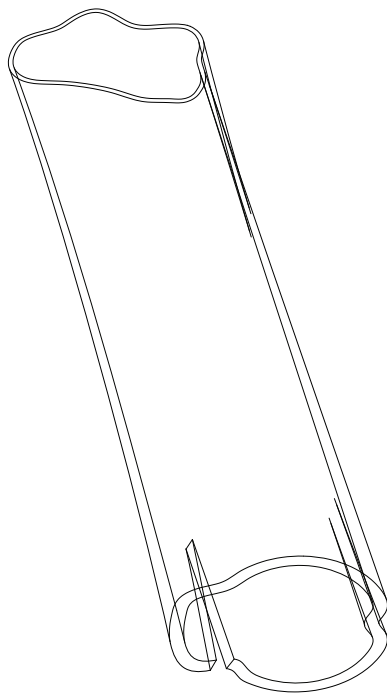


Figure 53 - Tower 1 axonometric drawing. Image Author.

Tower 2 – Ascension

The second tower is a sequence of spiral stairs with platforms that frame a perspective of the inner world of the museum and the outer world of Waikīkī. This physical journey upward makes the user aware of the procession. The platforms of relief provide a vista toward views of both Waikīkī (being able to view Waikīkī through a different lens) and into the lot (a new perspective of the inner boundary).



TOWER 2 - ASCENSION

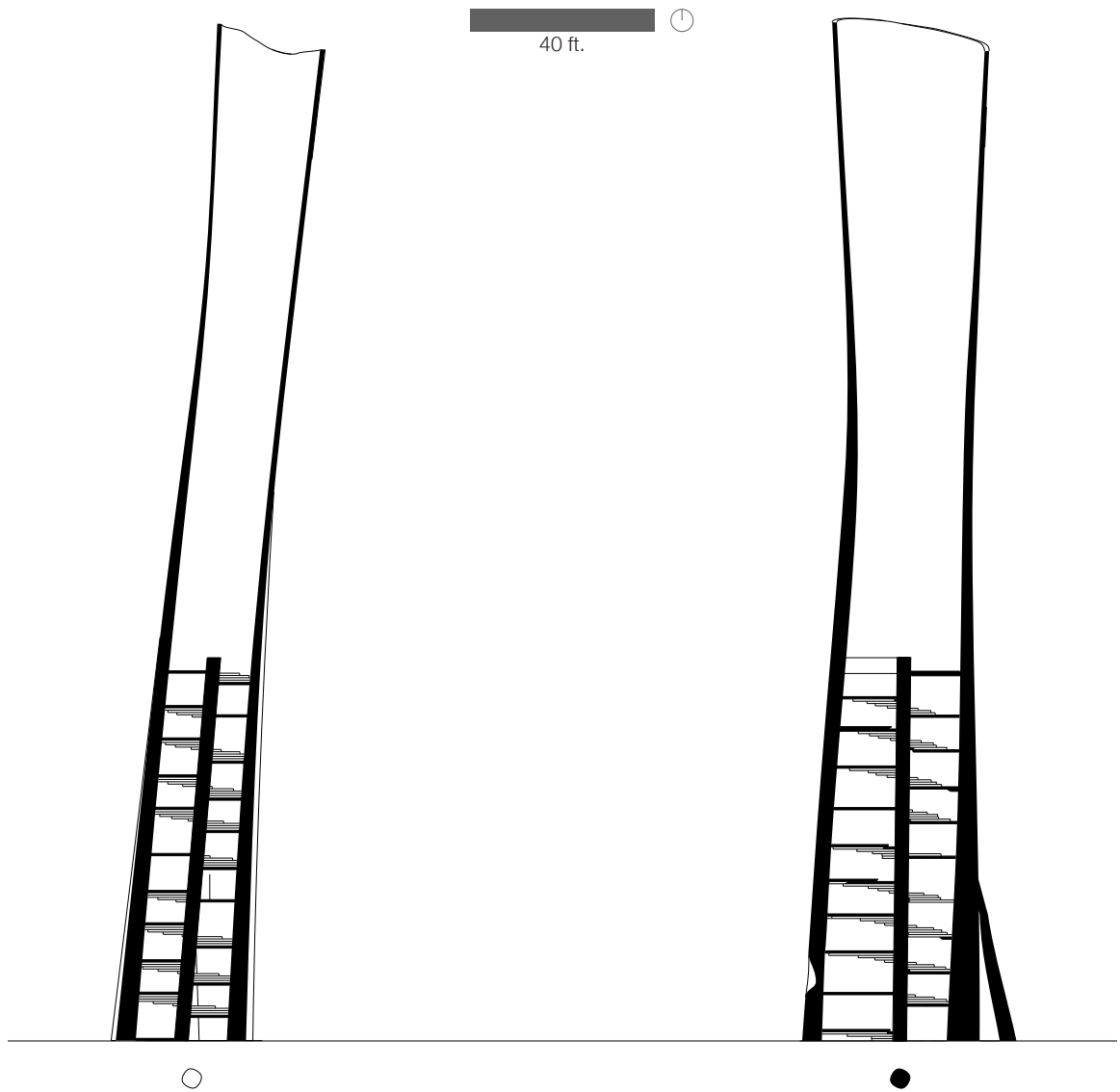


Figure 54 - Tower 2 section. Image Author.

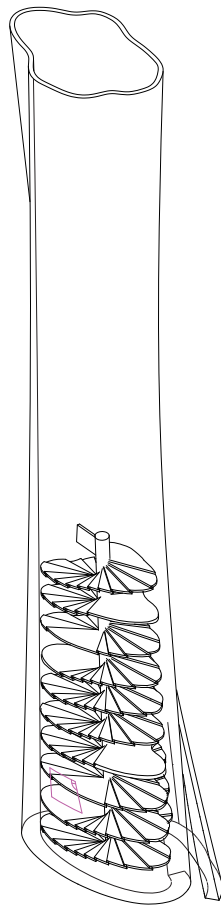


Figure 55 - Tower 2 axonometric drawing. Image Author.

Tower 3 – Levitation

The third tower is a tracked platform that ascends 300 feet in the twisting concrete tube. The long slit-like entry is a guide to an oval platform that is rung by a bench. As the platform slowly rises to the top, the tall slit of the entry gradually disappears and the platform reaches darkness for a moment. As it progresses upward, the light slowly reveals itself again. At the top of the tower is an observation deck that overlooks Waikīkī.

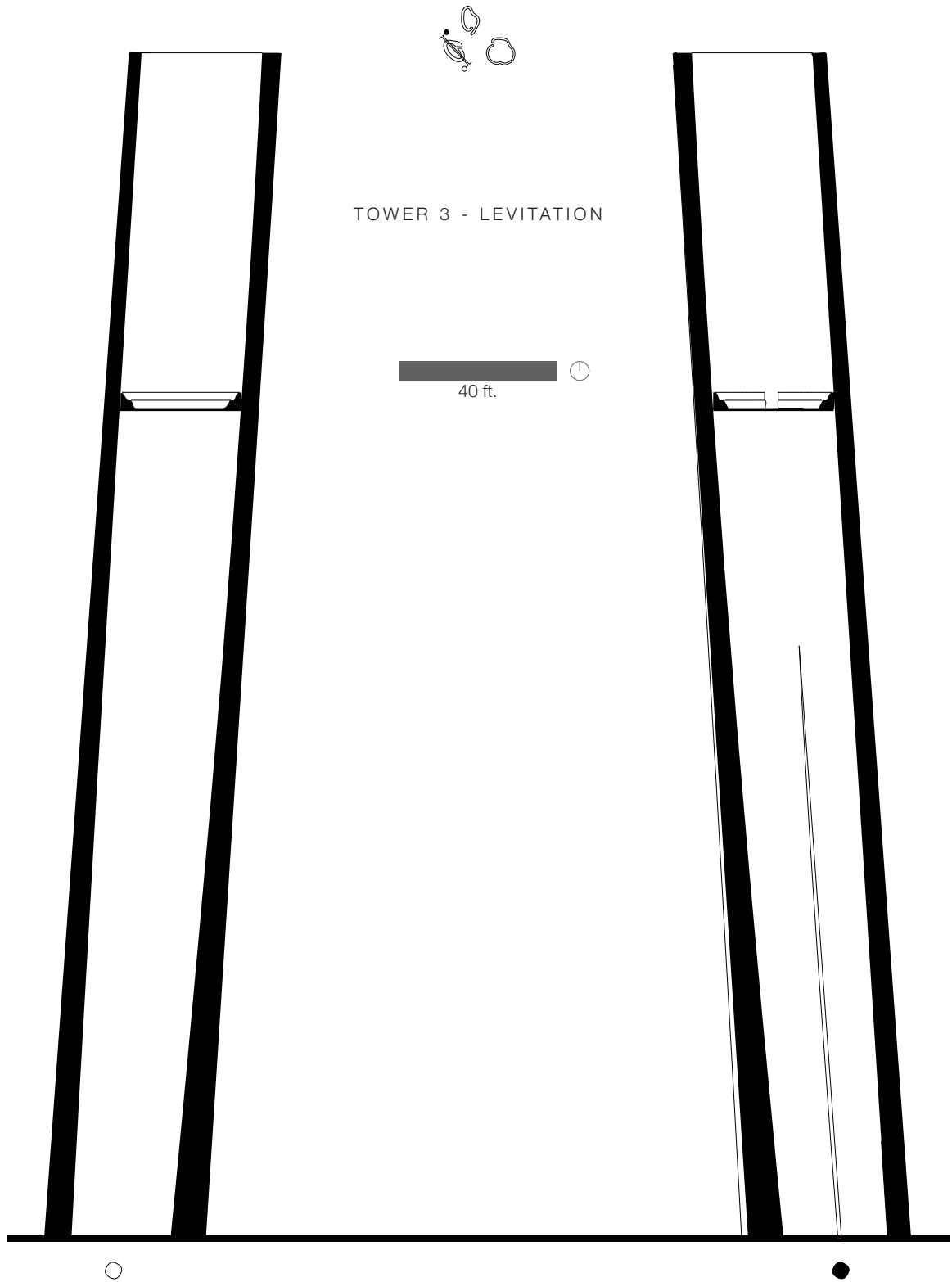


Figure 56 - Tower 3 section. Image Author.

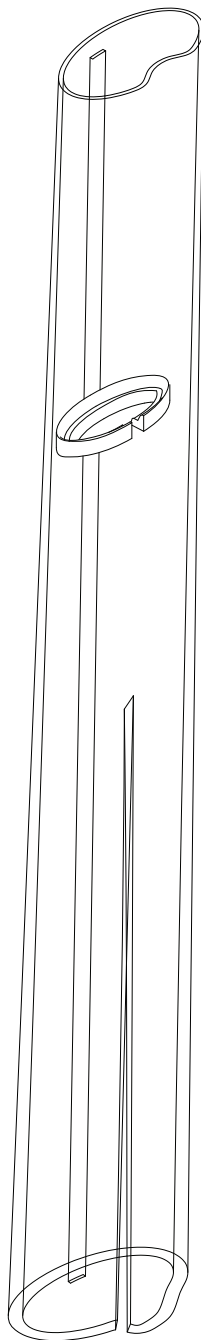


Figure 57 - Tower 3 axonometric drawing. Image Author.

The Experience

This museum within Waikīkī provides an experience that has been lost. It gives an awareness to the land and its surroundings. We can no longer go back to what was before, but we can remember how it use to be. The abstraction of the towers allows for displacement and removal from the context of present Waikīkī and is able to transport to another memory.

6. Design Critique

In order to critique the proposed design in Waikīkī, this section will use the concepts that had been synthesized in the comparative analysis. The comparative analysis outcomes are:

Architectural Relationships	Theory
Site	The relationship between the structure and landscape shapes the users experience and the more in harmony it is, the more tranquil the experience.
Procession	Removal from the real world into something unfamiliar creates a transformative experience.
Nature	From a direct relationship with the environment, the observer gains an intimate connection with the experience because they are more in tune with their surroundings. There is a deeper connection between the observer and nature.
Light	Light defines a space in which people may perceive a boundary, or a sacred object in which light becomes its own element.

6.1 Site

To recall, in this research, site is defined as the physical location of a structure with a consideration on a structure's sense of place. In the Teshima Art Museum, Nishizawa found it important to express the coexistence of the landscape, architecture, and art. The building height was kept at its minimum possible dimension in order to maintain a harmonious relationship with the surrounding environment and to pronounce the significance of Naito's installation. The Teshima Art Museum also takes the natural shape of the hills which emphasizes the horizontal feel of the setting.

The sites of Teshima and Waikīkī are different in that Teshima has a naturally rolling landscape with hills and terraces while the topography in Waikīkī is flat. In order for the project in Waikīkī to adapt to its site, it instead connects with the topography of the buildings. The vertical rhythm of the surrounding buildings is represented in the extruded concrete towers. The vertical language between the museum and the surrounding context strike a harmonious relationship between structure and context.

The contrast between the façadelessness of the museum in Waikīkī and the conventional articulation of the surrounding buildings highlights the abstraction of the project. The abstraction of the project also allows one to inject their own interpretation of the form of the building such as a leaning palm tree sprouting from the sand or billowing fabric in the wind.

6.2 Procession

Procession was earlier described as the scripted movement of people through architecture. In the Teshima Art Museum, the journey of traveling to a remote island was a key element in experiencing the tranquility of the space. To visit the Teshima Art Museum, a threshold of water is traveled over by ferry from the nearest port and then once on the island, the visitor must ascend up Mt. Myojin to reach the museum. And then, there is the path that takes you from the road and navigates around the rolling landscape slowly revealing the Teshima Art Museum. The slow reveal creates a sense of suspense that entices the experienter to explore more. From the comparative analysis, the research has established that the removal from the real world into something unfamiliar creates a transformative experience.

The journey to the museum in Waikīkī starts from the moment where you only see the tops of the white concrete towers peaking behind the other buildings of Waikīkī. The peculiarity of the building invites the viewer to learn more about it.

The path leads the visitor into the inner boundary of the space and gives a choice of entering one of the three towers. Within the towers is a sense of vertical procession, similar to how people experience building in the city—through elevators, stairs, and the ground floor. The entrance into the first tower leads into an open floor with an opening to the sky. The second tower is a series of stairs where users experience a physical vertical procession. During the journey upward, there is a sequence of openings. The third tower is also a vertical procession but a platform lifts the user up towards the sky. The vertical procession in the museum displays a different experience because it is taking similar actions and transforming the displays into experiences that force you to interact with the environment differently.

6.3 Nature

In this research, nature is discussed as elements such as weather, vegetation, and wildlife. It is an extension to the concept of site which views the surrounding through the intimate lenses of smell, touch and sound. The Teshima Art Museum maintains an effortless connection with external elements, allowing nature—such as rain, wind, insects, and birds—to move freely throughout.

Since Teshima uses its immediate natural elements rather than replicating another environment, this poses the question of what types of natural elements can be found and enhanced in urban Waikīkī. Since the value of water in Waikīkī is prevalent in both the past and the present, the final project reintroduces water back into the site. The site acknowledges the presence of water with the water channel that follows the edge to the lot as well as the pools of water that are retained in the large graveled portion of the lot.

Water has a significance in the place of Waikīkī because it was once an agricultural wetland. Native Hawaiian royalty also enjoyed the leisure and rejuvenating nature of the water in Waikīkī. Since the marshland of Waikīkī has been replaced with the urban grid, water has been reintroduced into the site with the use of the water channel around the lot. This channel of water also lets the users experience the shallow level of water occurring in Waikīkī.

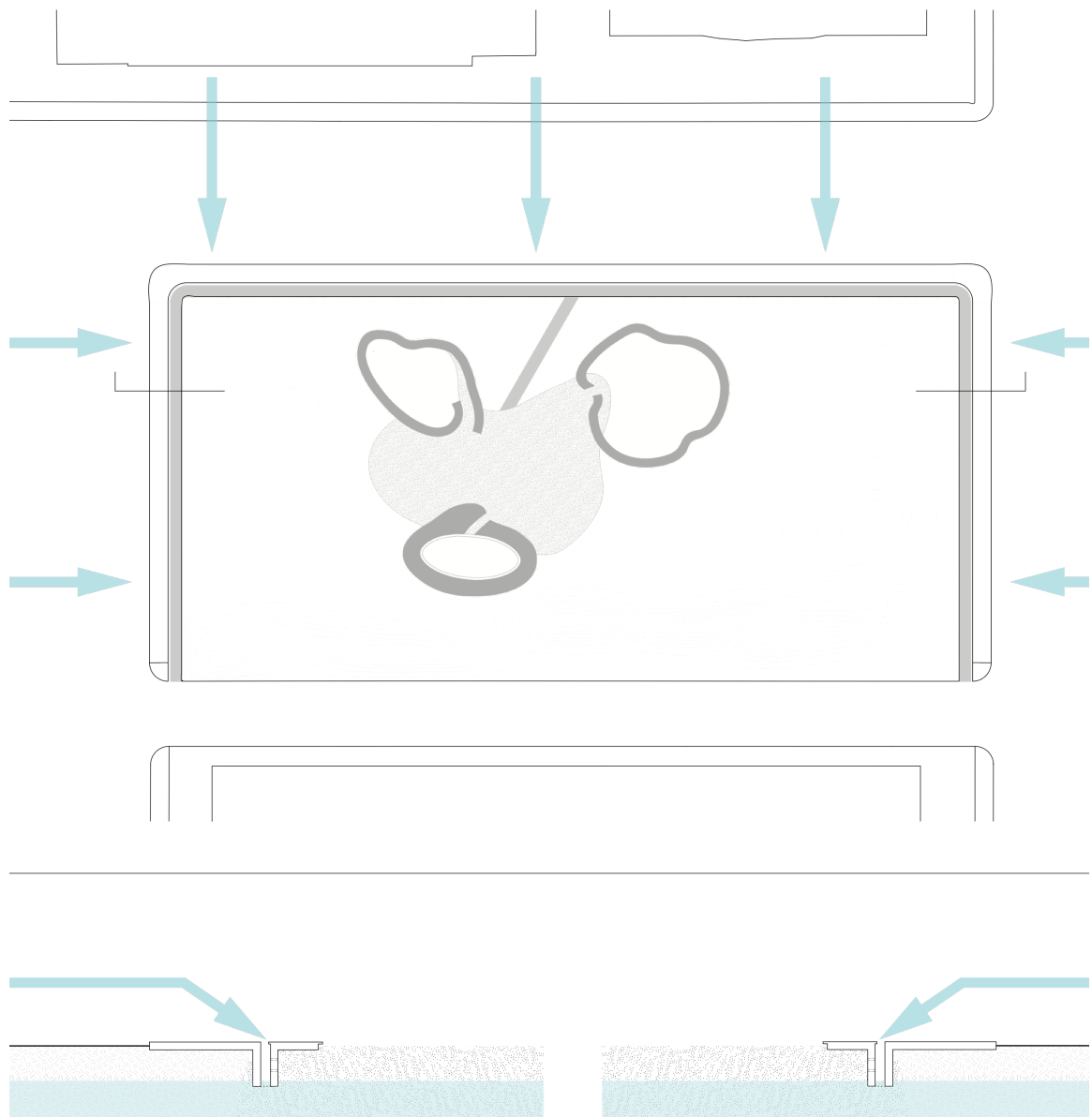


Figure 58 - Water flow to site. The site retains storm water and rainwater and recharges the aquifers. Image Author.

This project strays from introducing man-made interventions of water. Instead, it takes advantage of the water found naturally on the site. Because the water table is so high in this area, relative to the ground level, it can be seen when you dig not too deep into the

soil. And the water table is tidal with the ocean, so its height changes throughout the day. A slice around the perimeter of the property allows ground water to be visible.

The other source of water found on the site is rain water and surface runoff. The site is reopened as a porous site, allowing runoff from the surrounding context to come onto the site, be retained, and percolate back into the aquifers – while creating a water feature in the meantime. This on-site water changes with the seasons. Sometimes there is more water on site in rainier months, and sometimes there is less.

6.4 Light

Light is described as an ephemeral quality that becomes tangible when it is projected on a substance and is experienced as an object of itself. The Teshima Art Museum exclusively uses natural light to fill the room using its two apertures. The position of the light in the museum changes throughout the day causing the space perceived in it to change. The light becomes a focal point that people tend to observe.

The museum in Waikīkī also solely relies on natural light to filter into the concrete tubes. The light in Tower 1 uses light as an object to focus on in the space. The light is measured as its own element that lays on the irregular surface of the wall which changes shape throughout the day. In Tower 2, light is experienced sequentially as a person circulates upward as openings are revealed periodically during the journey. In Tower 3. Light changes by mechanical means as the platform ascends upward. The light slowly disappears through the long slit and for a moment, one is in complete darkness and then gradually is lead to an overlooking view of Waikīkī, completely exposed in light. Within these three towers, light is experienced in multiple ways. Respectively, the experience of light is perceived from a distance, the other is physically initiated, and the last is imposed.

The journey through light evokes multiple types of emotion during the experience. When the body is in complete darkness, their awareness of the context disappears but once back in the presence of light, their surroundings are revealed.

7. Conclusion

This dissertation is the accumulation of research, analysis, and experimentation of the concepts found in the Teshima Art Museum and its translation into an urban environment. It discussed the history of the island of Teshima and the adversities it had gone through with the establishment of an industrial waste treatment facility, and how the community is recovering and revitalizing its landscape. It then goes into the conception of the Teshima Art Museum itself with the vision of the artist and architect Rei Naito and Ryue Nishizawa. My personal experiences of the Teshima Art Museum were a key factor in conducting the subjective analysis.

A comparative analysis was conducted and investigated the relationships between the Teshima Art Museum and site, procession, nature, and light against projects that exemplified similar values. The projects considered were the Chichu Art Museum by Tadao Ando, the Shrine of the Book by Fredrick Kiesler and Armand Bartos, the Nordic Pavilion by Sverre Fehn, and the Chapel of the Holy Cross by Pekka Pitkänen. From this analysis, the research has synthesized the concepts from the relationships. The concepts deduced from the analysis were used to inform the design of a museum in Waikīkī. It had proposed a design that represented a transcendental space that was found at the Teshima Art Museum. This was evaluated by a critique against the concept found from the research.

To conclude, the concepts of the Teshima Art Museum were translated into the urban context of Waikīkī in Honolulu using abstract language that has adapted to the surrounding environment. The abstraction of elements allows visitors to project a deeper connection with the space. The concepts are applied abstractly in order for the material forms to retreat and in return the relationships are highlighted. The simplicity of elements of the structure provide opportunities for people to conjure meaning out of seemingly nothing.

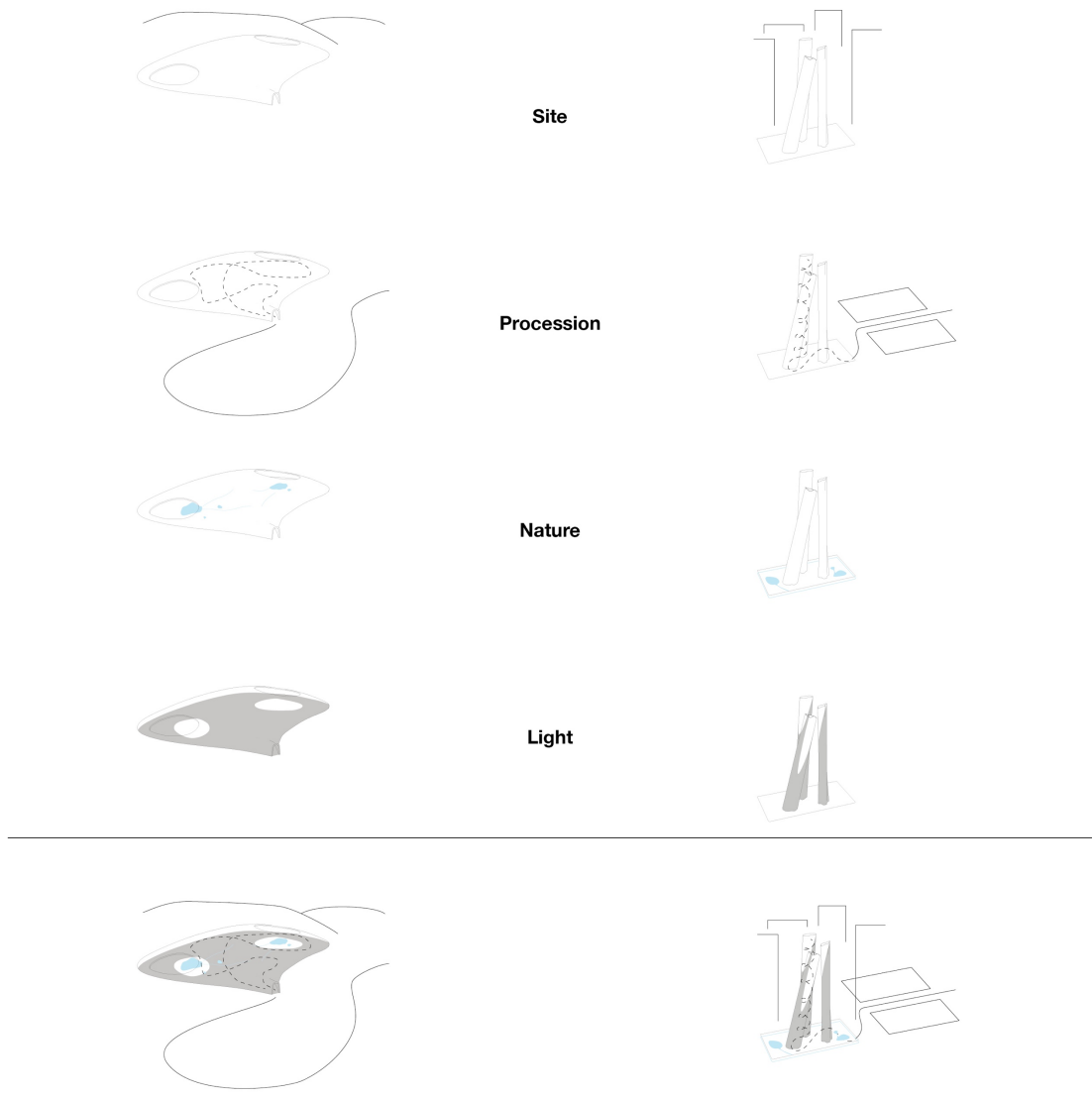
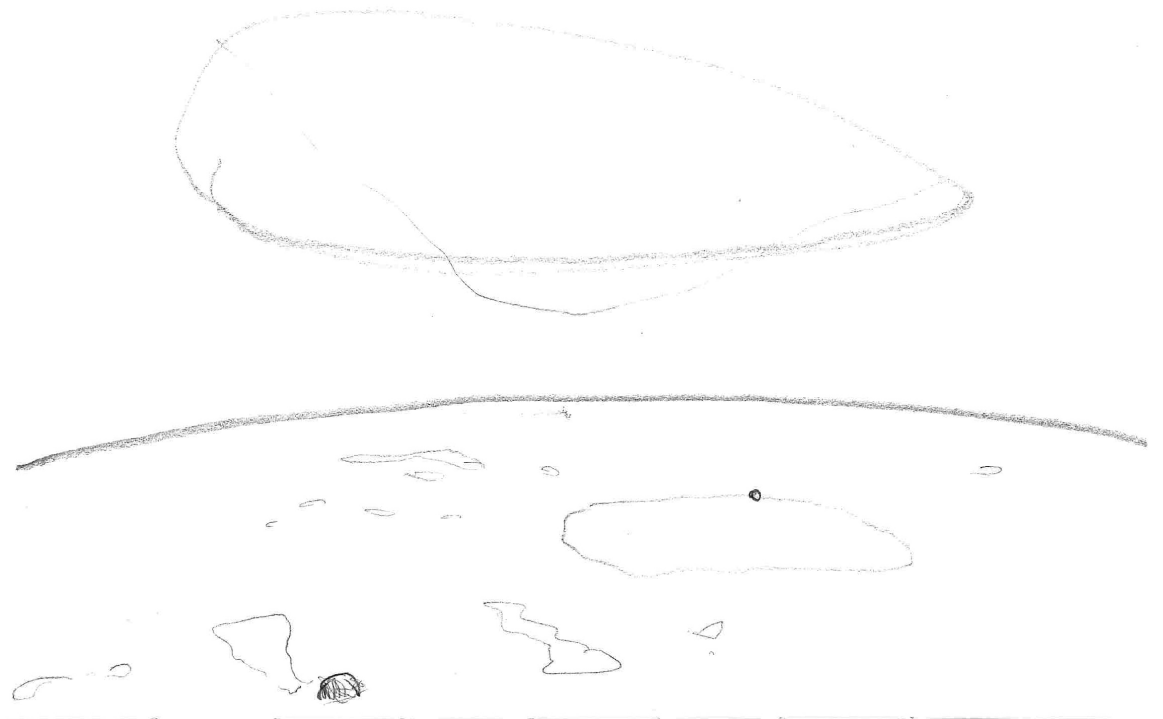
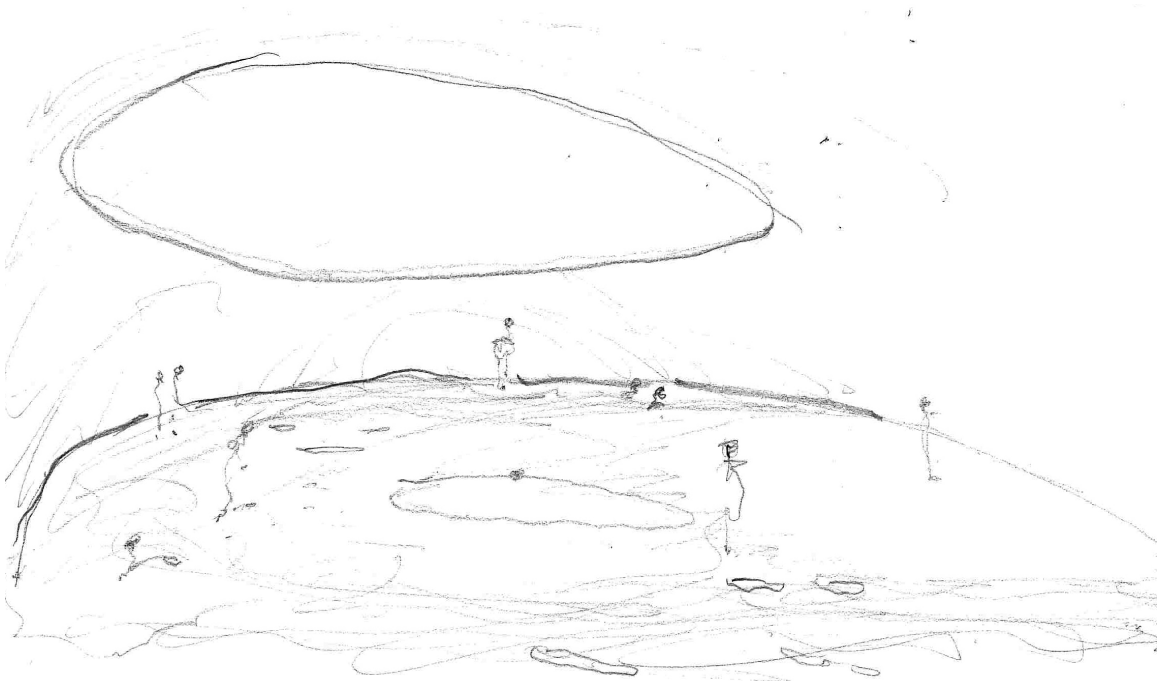
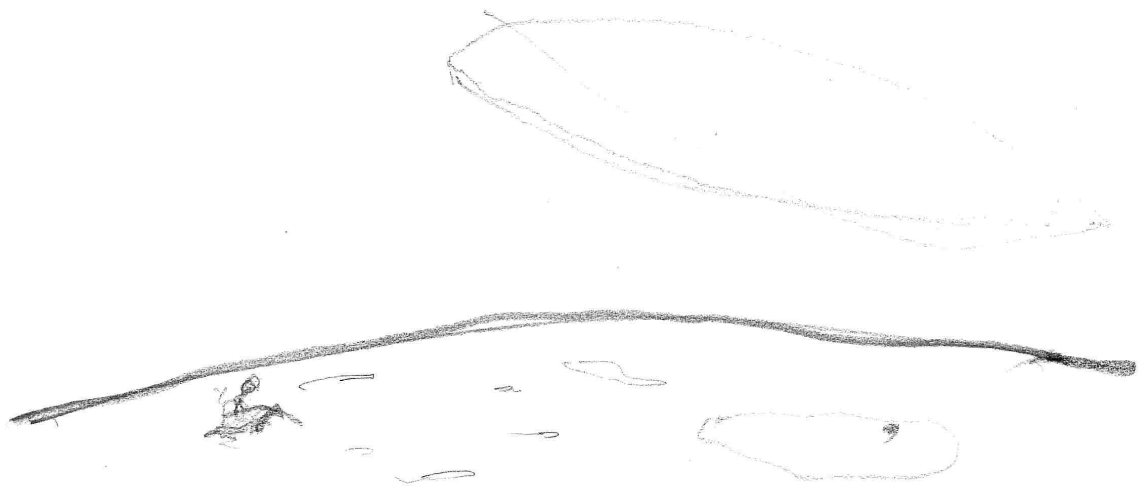


Figure 59 - Translation from Teshima to Waikiki. Image Author.

Appendix A: Interior Sketches of Teshima Art Museum

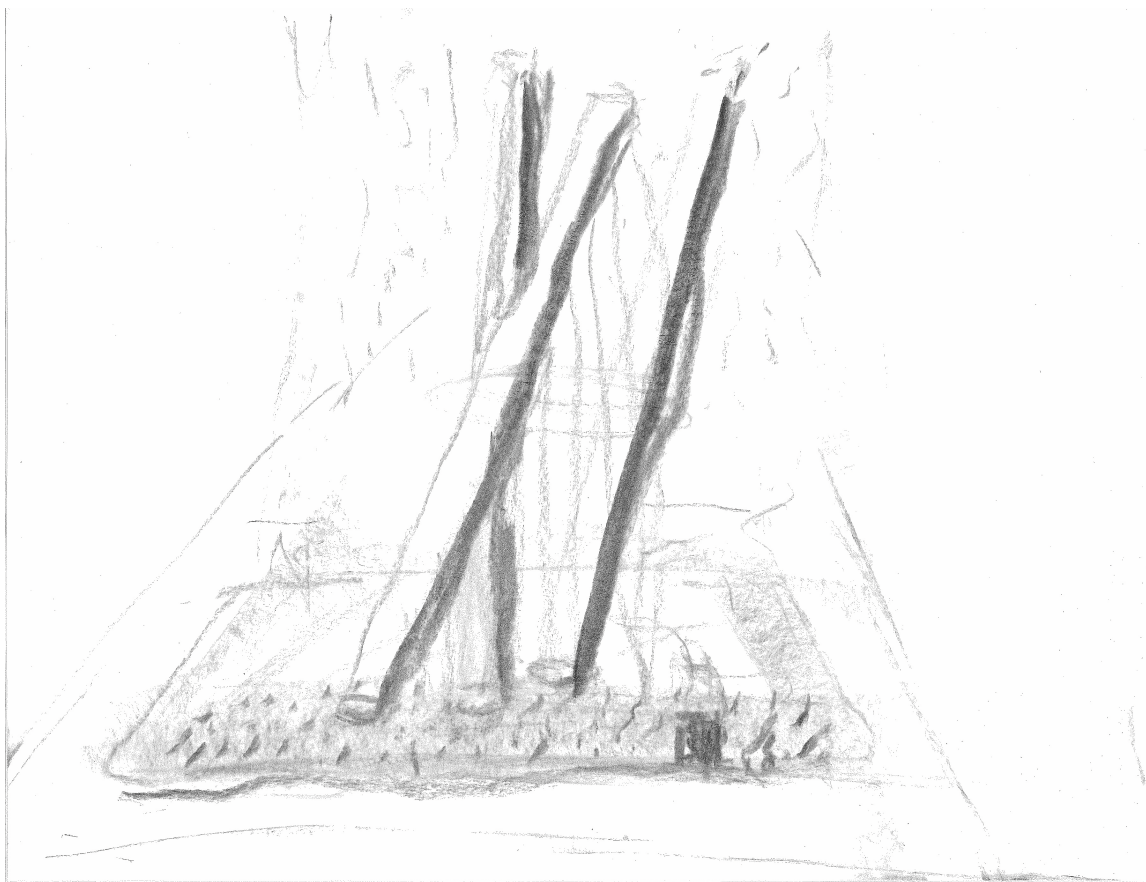


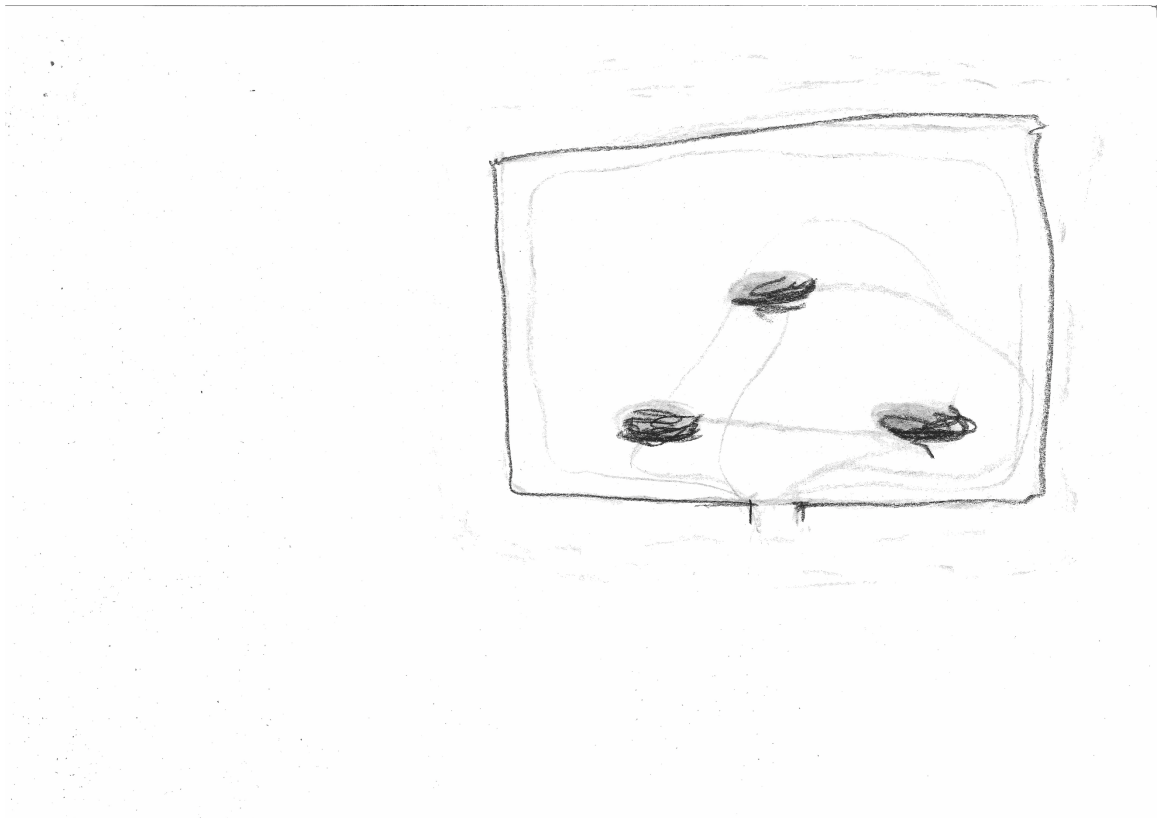
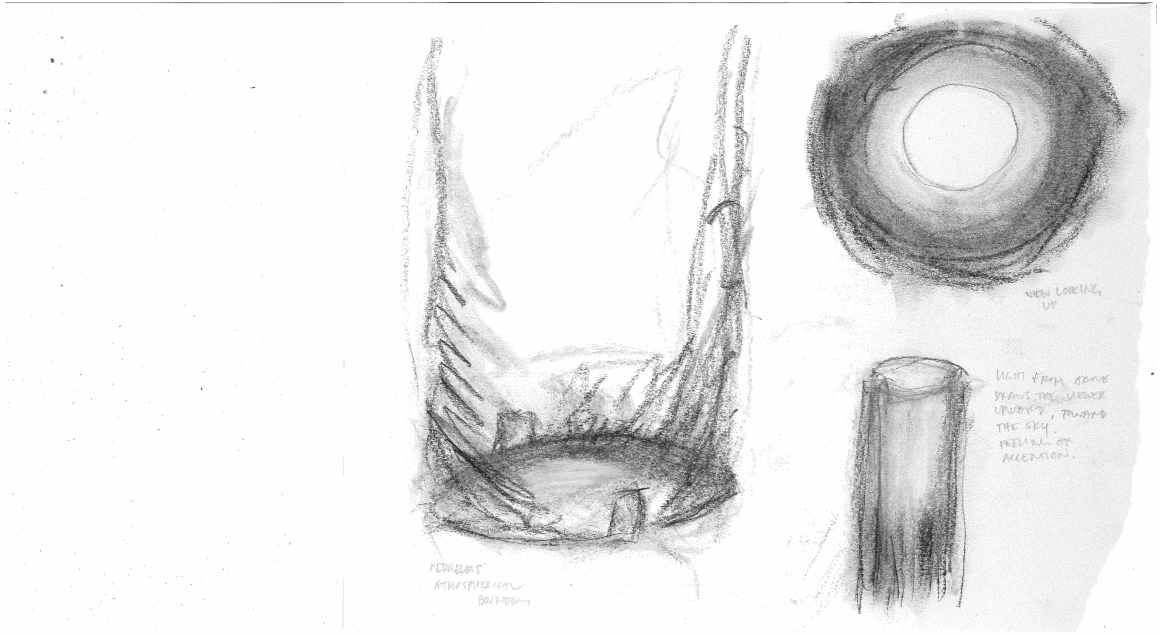


I wonder what she's thinking -
Why is she here?
She moved closer to the light, but back down again.



Appendix B: Concept Sketches of Museum in Waikīkī





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